

# D-T66

## SERVICE MANUAL

US Model  
Canadian Model  
AEP Model  
E Model  
UK Model



# Discman

### SPECIFICATIONS

#### CD section

System  
Laser diode properties

Compact disc digital audio system  
Material: GaAlAs  
Wavelength: 780 nm  
Emission duration: Continuous  
Laser output: Max. 44.6  $\mu$ W\*

\* This output is the value measured at a distance of 200 mm  
from the objective lens surface on the Optical Pick-up Block.  
500 r.p.m. to 200 r.p.m. (CLV)

1.2-1.4 m/sec.

Sony Super Strategy Cross Interleave Reed Solomon Code

16-bit linear 8 fs digital filter

20-20,000 Hz  $\pm$ 3 dB

Below measurable limit\*\*

\*\* Measured by EIAJ CP-307

Line output (stereo minijack)

Output level 0.6 V rms at 50 kilohms

Load impedance over 10 kilohms

Headphones (stereo minijack)

9 mW + 9 mW at 16 ohms

#### Radio section

Frequency range

AEP (except Italian) and Canadian

FM: 87.5-108 MHz in 50 kHz (100 kHz) intervals  
AM: 531-1602 kHz in 9 kHz intervals  
530-1710 kHz in 10 kHz intervals

Italian model

FM: 87.5-108 MHz in 50 kHz intervals  
AM: 531-1602 kHz in 9 kHz intervals

UK model

FM: 87.5-108 MHz in 50 kHz (100 kHz) intervals  
AM: 530-1710 kHz in 10 kHz intervals  
531-1602 kHz in 9 kHz intervals

E model

FM: 76-108 MHz in 50 kHz intervals  
87.5-108 MHz in 100 kHz (50 kHz) intervals  
AM: 531-1602 kHz in 9 kHz intervals  
530-1710 kHz in 10 kHz intervals

Intermediate frequency

FM: 10.7 MHz  
AM: 450 kHz

Antenna

FM: Headphone cord or connecting cord antenna  
AM: Built-in ferrite bar antenna

#### CAUTION

The use of optical instruments with this product will increase eye hazard.

For the Customers in the UK model and AEP model:

CLASS 1  
LASER PRODUCT  
LASER KLASSE 1

This Compact Disc player is classified  
as a CLASS 1 LASER product. The  
CLASS 1 LASER PRODUCT label is  
located on the bottom exterior.

#### General

Power requirements

Rechargeable battery pack BP-2EX (supplied)  
Battery case EBP-2 (supplied) and two size AA (LR6) alkaline  
batteries (not supplied)  
DC IN 6 V jack accepts:  
Sony AC power adaptor (supplied)

| Where purchased | Operating voltage      |
|-----------------|------------------------|
| Canadian model  | 120 V AC, 60 Hz        |
| UK model        | 240 V AC, 50 Hz        |
| AEP model       | 220 V AC, 50 Hz        |
| E model         | 100-240 V AC, 50/60 Hz |

Power consumption

Dimensions

Sony CPM-200P mount plate for use on 12 V car battery  
(not supplied)

Lithium battery (Sony CR2025)

1.4 W DC  
Approx. 128  $\times$  35.4  $\times$  145 mm (5  $\frac{1}{8}$   $\times$  1  $\frac{7}{16}$   $\times$  5  $\frac{3}{4}$  in.) (w/h/d)

not incl. inclined part (depth), projecting parts and controls

Approx. 130  $\times$  36.6  $\times$  146 mm

(5  $\frac{1}{8}$   $\times$  1  $\frac{1}{2}$   $\times$  5  $\frac{3}{4}$  in.) (w/h/d)

incl. projecting parts and controls

Approx. 390 g. (13 oz) not incl. rechargeable battery

Approx. 475 g. (1 lb 1 oz) incl. rechargeable battery

AC power adaptor (1)

Rechargeable battery pack (1)

Hand strap (1)

Connecting cord (1) (stereo miniplug  $\leftrightarrow$  two phono plugs)

Battery case (1)

Headphones (1)

Lithium battery (1)

Design and specifications subject to change without notice.

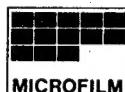
#### Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.



Polarity of the plug

FM/AM COMPACT DISC  
COMPACT PLAYER  
**SONY**®



CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

ADVARSEL !

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.  
Udskiftning må kun ske med batteri  
af samme fabrikat og type.  
Lever det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri – Eksplosjonsfare.  
Ved utskifting benyttes kun batteri som  
anbefalt av apparatfabrikanten.  
Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.  
Använd samma batterityp eller en ekvivalent  
typ som rekommenderas av apparattillverkaren.  
Kassera använd batteri enligt fabrikantens  
instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.  
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan  
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden  
mukaisesti.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT  
À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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## SECTION 1

### GENERAL

#### • Features

- Compact disc player with digital synthesizer tuner.
- Numeric buttons allow direct choice of selections (CD) or preset stations (TUNER).
- PHONES/REMOTE jack allows use of the stereo headphones with remote controller (not supplied).

#### Before Using the Radio

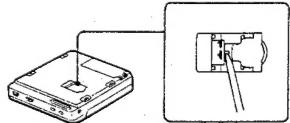
Stations preset at the factory for this unit are the ones listed under 1 in the table.

| The position of the switch<br>Preset Number | 1 (For US and<br>Canadian model) | 2 (AEP and E model) |
|---|----------------------------------|---------------------|
| 1   | AM 530 kHz                       | AM 531 kHz          |
| 2   | AM 620 kHz                       | AM 621 kHz          |
| 3   | AM 1,000 kHz                     | AM 999 kHz          |
| 4   | AM 1,400 kHz                     | AM 1,404 kHz        |
| 5   | AM 1,710 kHz                     | AM 1,602 kHz        |
| 6   | FM 87.5 MHz                      | FM 87.5 MHz         |
| 7   | FM 98.0 MHz                      | FM 98.0 MHz         |
| 8   | FM 108.0 MHz                     | FM 108.0 MHz        |
| 9   | AM 530 kHz                       | AM 531 kHz          |
| 10  | AM 620 kHz                       | AM 621 kHz          |
| 11  | AM 1,000 kHz                     | AM 999 kHz          |
| 12  | AM 1,400 kHz                     | AM 1,404 kHz        |
| 13  | AM 1,710 kHz                     | AM 1,602 kHz        |
| 14  | FM 87.5 MHz                      | FM 87.5 MHz         |
| 15  | FM 98.0 MHz                      | FM 98.0 MHz         |
| 16  | FM 108.0 MHz                     | FM 108.0 MHz        |
| 17  | AM 530 kHz                       | AM 531 kHz          |
| 18  | AM 620 kHz                       | AM 621 kHz          |
| 19  | AM 1,000 kHz                     | AM 999 kHz          |
| 20  | AM 1,400 kHz                     | AM 1,404 kHz        |

(Position 3 is the same as the position 2.)

#### How to select the factory preset stations

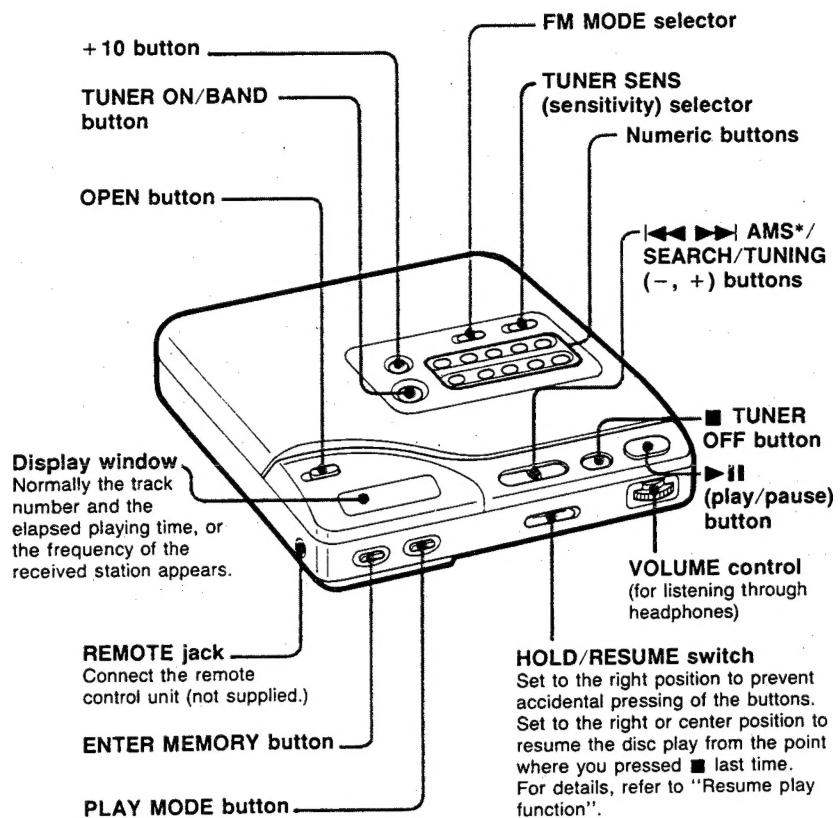
- 1 Remove the power sources and the lithium battery from the unit.
- 2 Set the switch to the appropriate position according to the area where you use the unit, with a ball-point pen or other pointed object.



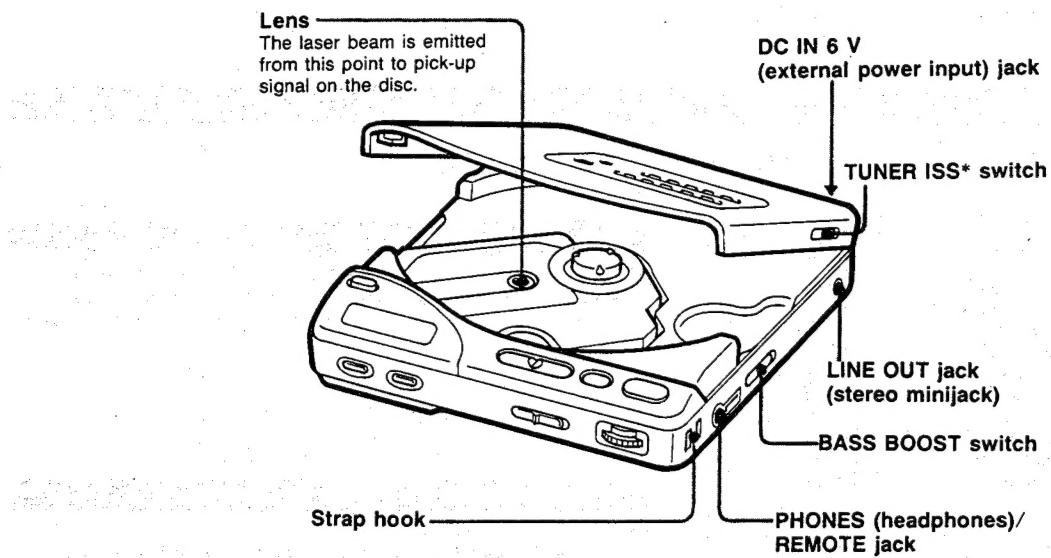
#### To use the unit in European countries

Set the switch to position 2. **Never use the supplied AC power adaptor.** Be sure to use the AC power adaptor whose operating voltage and frequency are the same as the local power line voltage and frequency.

## • Location and Function of controls



\* AMS is the abbreviation of Automatic Music Sensor.



\* ISS is the abbreviation of Interference Suppress Switch.

## SECTION 2

### SERVICING NOTES

#### NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

#### Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270° ± 10°C during repairing.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

#### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

#### Before Replacing the Optical Block

Please be sure to check thoroughly the parameters as per the "Optical Block Checking Procedures" (Part No.: 9-960-027-11) issued separately before replacing the optical block.

Note and specifications required to check are given below.

- FOK output : IC501 ⑨ pin  
When checking FOK, remove the lead wire to disc motor and unsolder and open IC801 ⑦ pin.
- S curve P-to-P value : 2.5 Vp-p
- Adjusted part for focus gain adjustment : RV505
- RF signal P-to-P value : 0.8-1.35 Vp-p
- Traverse signal P-to-P value : 1.8 Vp-p
- The grating holder can not repair.
- Adjusted part for tracking gain adjustment : RV501

## NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe, from more than 30cm away from the objective lens.

## Laser Diode Check Procedure

The laser diode on this set will not emit unless the top panel is closed and S901 (leaf SW type) is turned on. The laser diode will always emit even if focus search is not performed in service mode.

The laser diode is checked using the current value which flows to the laser diode inside the UPF.

## Procedure 1 (service mode or normal operation)

Check the laser diode emission with the eye.

1. Open the top panel.
2. S901 on as Fig. 1.  
(In service mode, this operation is not necessary.)
3. Press the  $\blacktriangleright\blacksquare$  key.  
(In service mode, this operation is not necessary.)
4. Observe the objective lens and confirm that the laser diode is emitting light. At this time, the laser diode goes on about 10 seconds due to focus search. If it does not, APC circuit or UPF is defective.

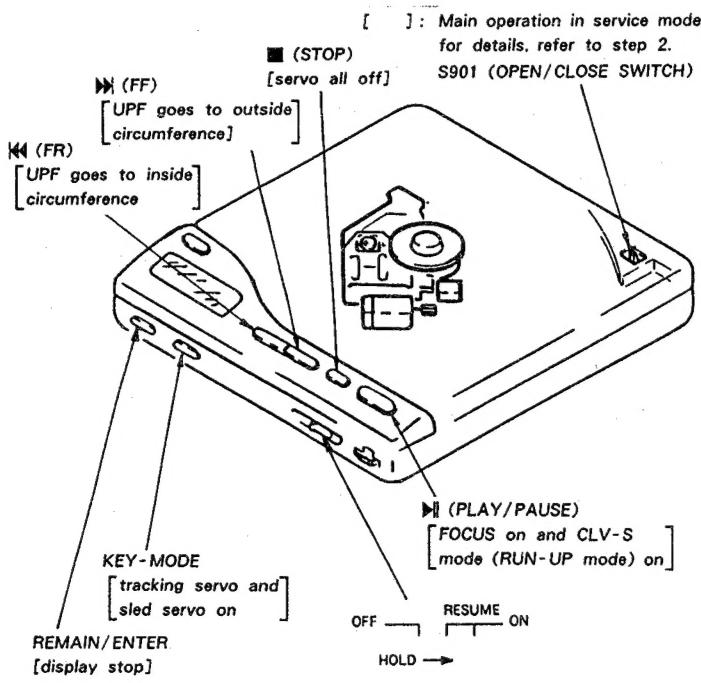
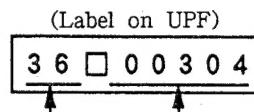


Fig. 1 Turning S901 on/Key positon.

## Procedure 2 (service mode or normal operation)

Check by the current with flows in the laser diode.

1. Close the top panel.
2. Remove the main board and read the current value on the label affixed to the UPF.



Serial number of the optical pick-up block.  
current value  
This means 36mA.

The current value varies with the set.

3. Connect a VOM as shown in Fig. 2.
4. Press the  $\blacktriangleright\blacksquare$  key.
5. Calculate the current by the VOM reading.  
 $VOM\ reading\ (V) \div 10 = current\ (A)$   
ex. VOM reading = 0.36V  
 $0.36 \div 10 = 0.036\ (A) = 36\ (mA)$
6. Confirm that the ammeter reading is within the range given below.  
value on label  $\pm 5$  mA (25°C)  
variation relative to temperature: 0.4mA/°C  
(Current increases when temperature rises and decreases when temperature goes down)  
If the value is more than the range given, APC circuit has been defective or the laser diode has deteriorated.  
If it is less, APC circuit or UPF is defective.

## SERVICE MODE (service program)

This set has built-in service program in the microcomputer as usual sets.

The operation method of service program is explained below.

## Step 1 (Service Mode setting method)

1. Turn the HOLD switch OFF with the external power supply not plugged in (no power applied to set) and press the  $\blacktriangleright\blacksquare$  key.
2. Solder jumper TEST point.  
Short Z5 (TEST) jumper terminal. (Z5 (TEST) jumper terminal is connected to pin 13 of IC802. (IC801 pin 55 (BAT-E) is grounded.)
3. Plug in external power supply.  
This puts the set into service mode.

## SECTION 3

### ELECTRICAL ADJUSTMENTS

#### Step 2 (Service Mode operation)

- When service mode is set, the display will change 6 times, and those 6 changes will be repeated over and over. With this the LCD display should be present in service mode. Even if LCD does not display, other operations will be performed.
- When **▶▶** or **◀◀** key is pressed, the UPF moves to the inside or outside circumference. Tracking servo and sled servo go off when this is done, so press KEY-MODE to turn on the tracking servo if necessary.
- When REMAIN is pressed, the display stops. When REMAIN is released, the display continues to change. This allows check of each segment.
- When **▶▶▶** key is pressed, CLV-S (pull-in mode) starts while performing focus search. When there is no disc installed, focus search is repeated several times while disc motor is rotating.
- When KEY-MODE is pressed, focus servo, tracking servo, sled servo and CLV-A (servo during PLAY) go ON.
- When 4 and 5 are performed, the disc begins to play. At this time, the top panel should be closed and S901 are to be ON.
- All servo (focus, tracking, sled and spindle) go off when **■** key is pressed. But disc motor continues rotating for a while by inertia.

#### Step 3 (Service Mode release)

- First be sure to unplug the external power supply, then remove the TEST point solder jumper.
- The set will now operate normally.

#### 3-1. CD SECTION

##### Notes on Adjustment

- Perform adjustments except for RECHARGEABLE VOLTAGE ADJUSTMENT and BATTERY DISPLAY ADJUSTMENT in service mode. Be sure to release service mode after completing adjustment. (Refer to "Service Mode (service program)" on page 5.)
- Perform adjustments in the order given.
- Use YEDS-18 disc (part No.: 3-702-101-01) unless otherwise indicated.
- Power supply voltage: 6V DC  
HOLD switch: OFF  
VOLUME control: MIN

#### PREPARATION

Put the set into service mode (see page 5) and perform the following checks. Repair if there are any abnormalities.

##### • Sled Motor Check

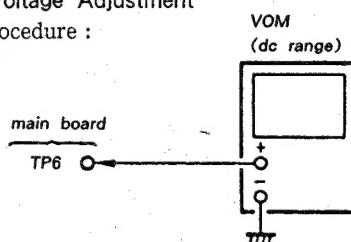
- Press the OPEN button and open the top panel.
- Press the **▶▶**, **◀◀** keys and make sure that the UPF moves smoothly, without catching, from the inmost → outmost → inmost circumference.  
**▶▶**: UPF moves outward  
**◀◀**: UPF moves inward

##### • Focus Search Check

- Press the OPEN button and open the top panel.
- Press the **▶▶▶** key. (Focus search is performed continuously.)
- Observe the UPF objective lens and check that it moves smoothly up and down with no catching or noises.
- Press the **■** key.  
Check that focus search operation stops. If it does not stop, press the **■** key again longer than before. But disc motor continues rotating for a while by inertia.

#### Rechargeable Voltage Adjustment

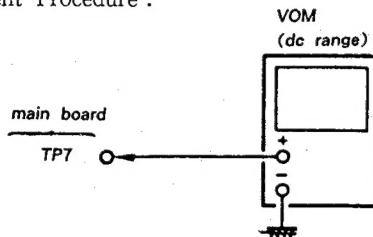
##### Adjustment Procedure :



- Connect the VOM to main board test point TP6.
- Apply DC 6V with regulated dc power supply from external power jack CN401.
- Adjust RV402 for 4.9-5V reading on the VOM.  
Note: Measure after the VOM reading becomes stable.

## +3.6V Adjustment

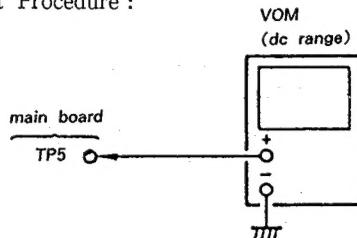
Adjustment Procedure :



1. Apply +3.0Vdc between the terminals for batteries (BATT : AM3).
2. Put the set into service mode (see page 6).
3. Connect the VOM to main board test point TP7.
4. Adjust RV403 for 3.55-3.65V reading on the VOM.
5. After adjustment, release service mode (see page 6).

## +5V Adjustment

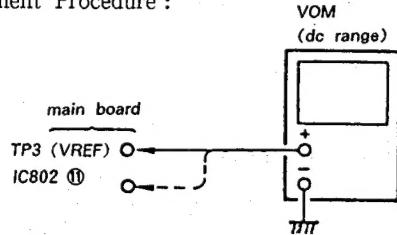
Adjustment Procedure :



1. Put the set into service mode (see page 6).
2. Connect the VOM to main board test point TP5.
3. Adjust RV401 for +5 ± 0.5V reading on the VOM.
4. After adjustment, release service mode (see page 6).

## Battery Display Adjustment

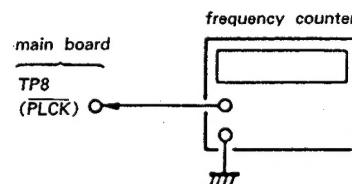
Adjustment Procedure :



1. Be sure that S401 is set to on.
2. Apply dc +3.5V to terminals for built in battery (BP-2).
3. Insert the disc (YEDS-18) and put the set into play mode.
4. Adjust RV801 so that main board IC802 ⑩ TP4 voltage and TP3 (VREF) voltage are equal.

## PLL Free Run Frequency Check and Adjustment

Check/Adjustment Procedure :



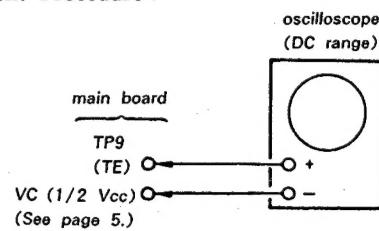
1. Disconnect the jumper point Z9 (EFM).
2. Connect a frequency counter to main board test point TP8 (PLCK).
3. Put the set into service mode (see page 6).
4. Check that the frequency counter reading is  $4.310 \pm 0.01$  MHz. If not, adjust RV504 so that it is  $4.310 \pm 0.01$  MHz.
5. After adjustment, release service mode (see page 6).
6. Short the jumper point disconnected in step 1.

## Tracking Balance Adjustment

Conditions :

The set should be placed disconnected horizontally.

Adjustment Procedure :

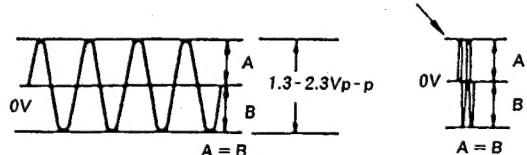


1. Connect the oscilloscope to main board TP9 (TE).
2. Put the set into service mode (see page 6).
3. Press the  $\blacktriangleright$  and  $\blacktriangleleft$  keys to move the UPF to the center.
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the  $\blacktriangleright\blacktriangleright$  key.

(It will go from focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.)

6. Adjust RV502 so that the oscilloscope waveform is symmetrical about OV axis.

Note : Take sweep time as long as possible to obtain best waveform.



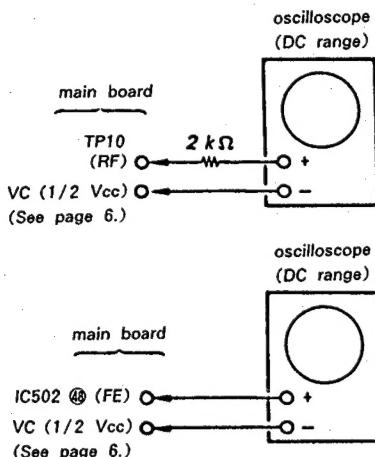
7. Unplug the external power supply to stop spindle motor from rotating.
8. After adjustment, release service mode (see page 6).

## Focus Bias Adjustment

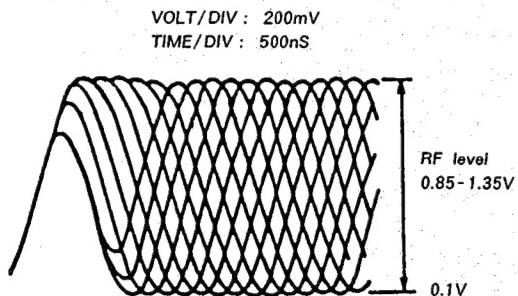
Conditions :

The set should be placed horizontally.

Adjustment Procedure :



1. Put the set into service mode (see page 6).
2. Connect the oscilloscope to main board IC501 ⑩ test point TP10 (RF).
3. Press the  $\blacktriangleright$  and  $\blacktriangleleft$  keys to move the UPF to the center. (Move the UPF to the music area on the disc to enable easy visibility of the eye pattern).
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the  $\blacktriangleright\blacktriangleright$  key.
6. Press the KEY-MODE button. (Tracking and sled go ON.)
7. Adjust RV503 so that the oscilloscope waveform eye pattern is good. A good eye pattern means that the diamond shape ( $\diamond$ ) in the center of the waveform can be clearly distinguished.
- RF Signal Reference Waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Connect the oscilloscope to test point TP11 (FE) (main board IC502 ⑩).
9. Unplug the external power supply to stop spindle motor from rotating.

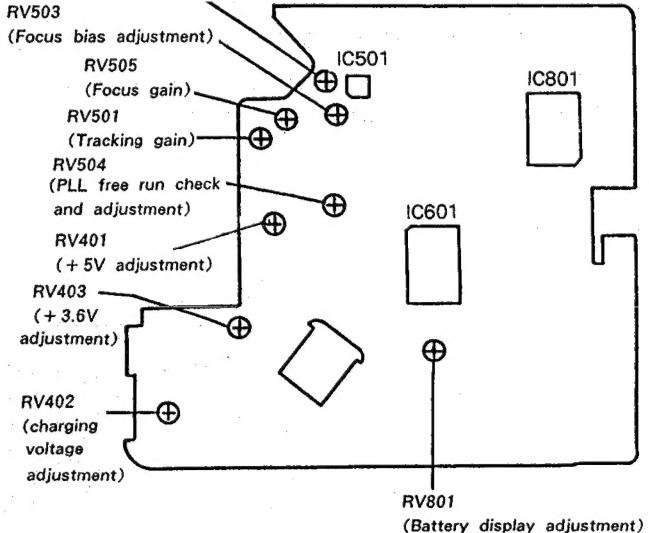
Adjust RV503 again referring to the table followed.

| oscilloscope reading | adjustment   |
|----------------------|--|
| more than + 10mV     | Adjust RV503 again for + 10mV reading on oscilloscope. |
| less than - 50mV     | Adjust RV503 again for - 50mV reading on oscilloscope. |

10. After adjustment, release service mode (see page 6).

Adjustment Location : main board

RV502  
(Tracking balance adjustment)



**Focus/Tracking Gain Adjustment**

A frequency response analyzer or CD jig is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up followup (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is high, the noise when the 2-axis device operates increases.
- When gain is low, it is more susceptible to mechanical shock and skipping occurs more easily.

This adjustment is to be performed when replacing the following parts:

- optical pick-up block
- RV505 (focus gain VR)
- RV501 (tracking gain VR)

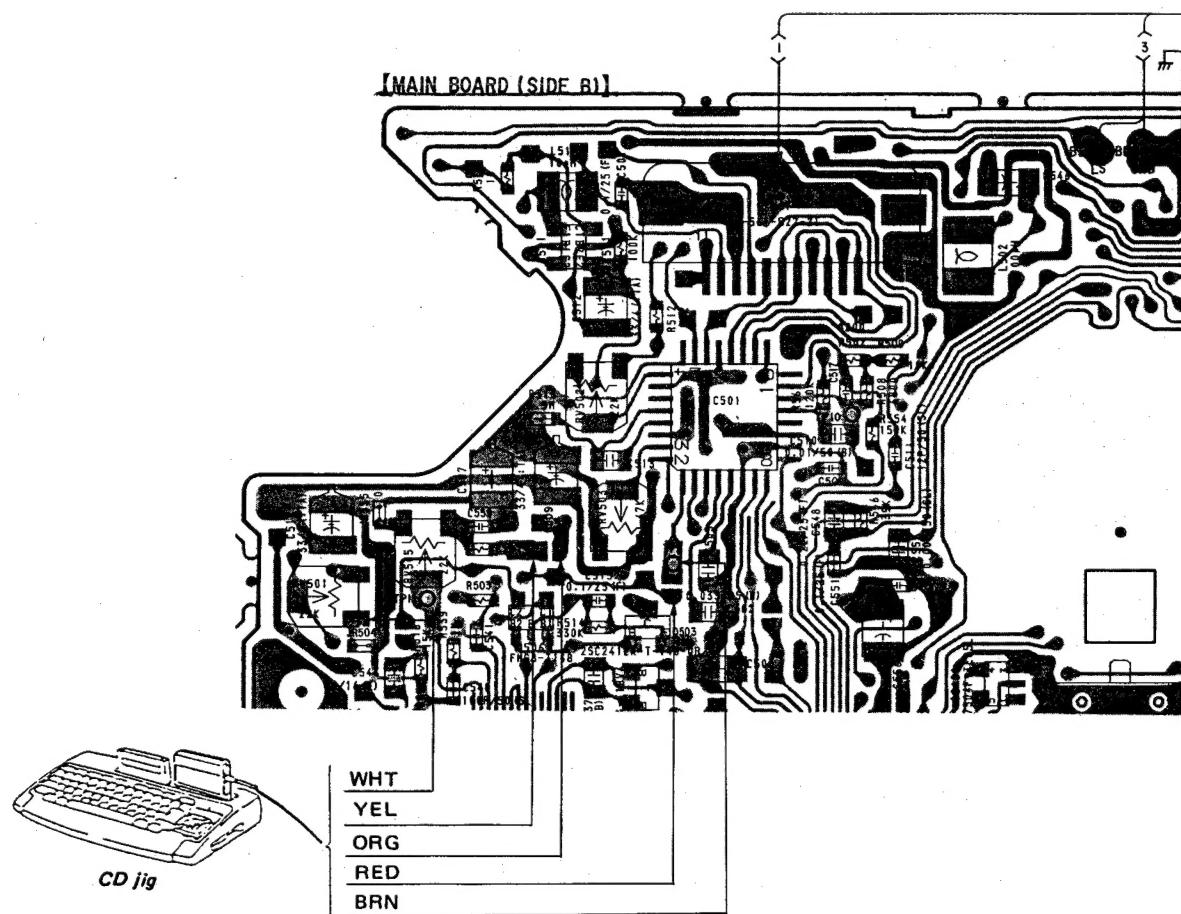
Be careful not to move RV505 (focus gain volume) and RV501 (tracking gain volume) ordinarily.

On this set, it is very difficult to simplify this adjustment. For those sets on which symptoms such as "occasional skipping" are hard to discover, or it is hard to tell if the set has been repaired, use the CD jig and perform this adjustment. Refer to the diagram below for connection of the CD jig. The adjustment procedure is described in the separate CD Jig Instruction Manual.

**CD Jig Connecting Procedure:**

Remove the solder jumpers at the TE and FE locations and connect the DC jig.

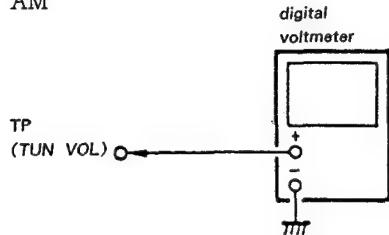
(Connect the points on both TE and FE located on the side of IC501 to the output to the CD jig, and points located on the side of volumes to the input from the CD jig.)



## 3-2. Radio Section

## AM SECTION

BAND : AM

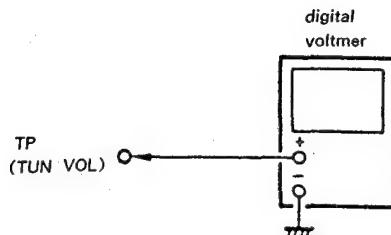


## AM TUNING VOLTAGE ADJUSTMENT

|   |          |
|---|----------|
| Adjust for following values on digital voltmeter. |          |
| Display indication                                | AM531kHz |
| Digital voltmeter reading                         | 1.1V     |
| Adjustment part                                   | L005     |

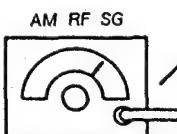
## FM SECTION

BAND : FM



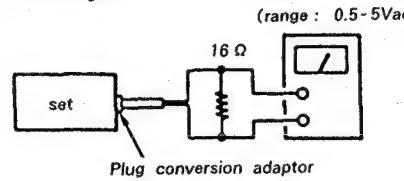
## FM TUNING VOLTAGE ADJUSTMENT

|   |         |
|---|---------|
| Adjust for following values on digital voltmeter. |         |
| Display indication                                | FM76MHz |
| Digital voltmeter reading                         | 1.2V    |
| Adjustment part                                   | L003    |

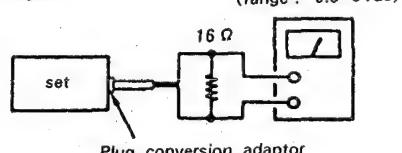


30 % amplitude modulation by 400Hz signal

Put the lead-wire antenna close to the set.



30 % amplitude modulation and 22.5kHz frequency deviation by 400Hz signal



- Repeat the procedures in each adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.
- Set the input level so that signals are obtained maximumly.

## AM TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

|                 |                |            |
|-----------------|----------------|------------|
| Display         | AM621kHz       | AM1,404kHz |
| SG frequency    | 621kHz         | 1,404kHz   |
| Adjustment part | L006 (BAR ANT) | CT003      |

## FM TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

|                    |         |
|--------------------|---------|
| Display indication | FM76MHz |
| SG frequency       | 76MHz   |
| Adjustment part    | L002    |

## AM IF ALIGNMENT

Adjust for a maximum reading on VTVM.

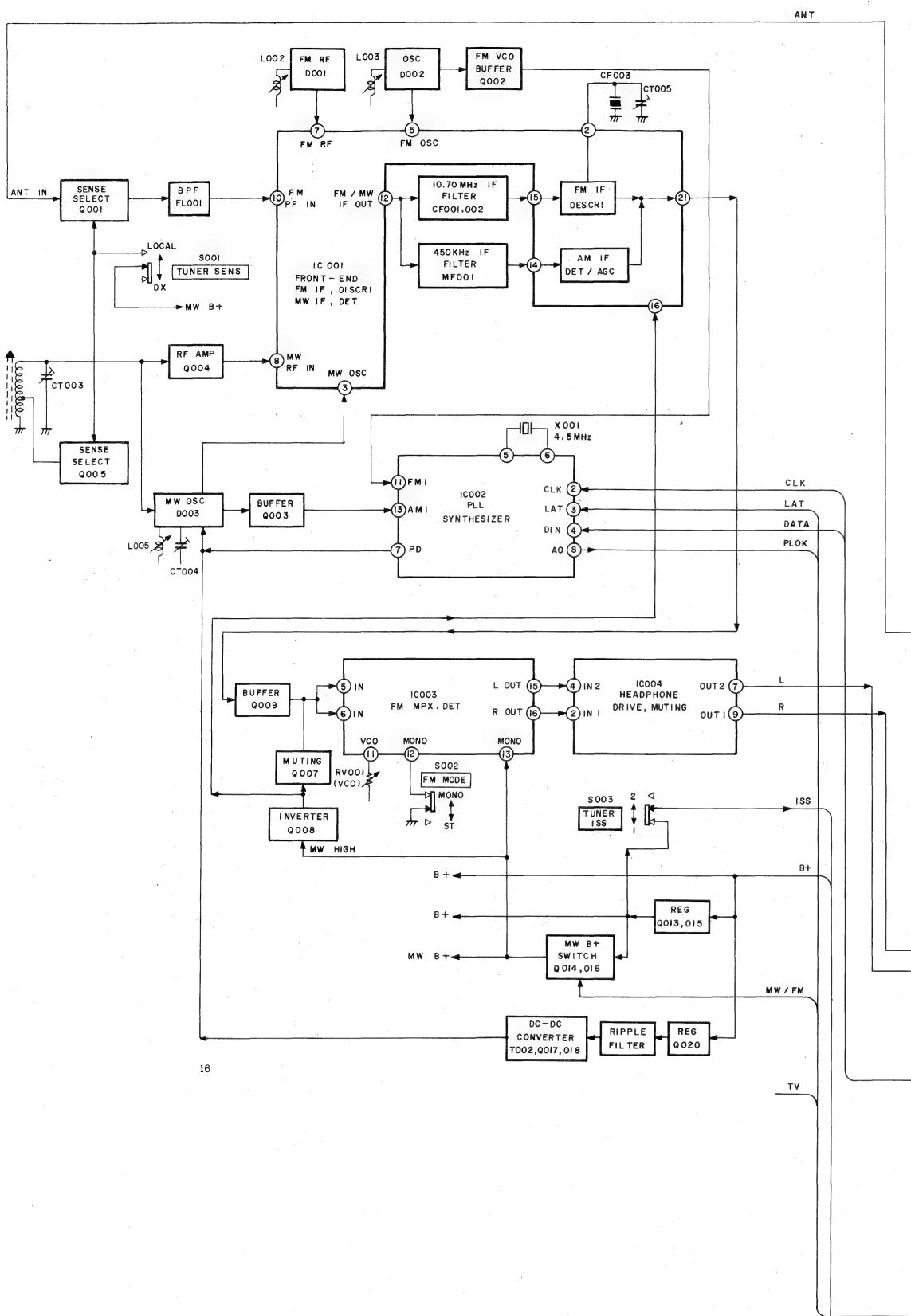
|                 |        |
|-----------------|--------|
| SG frequency    | 450kHz |
| Adjustment part | T001   |

## 4-1. LCD MODULE



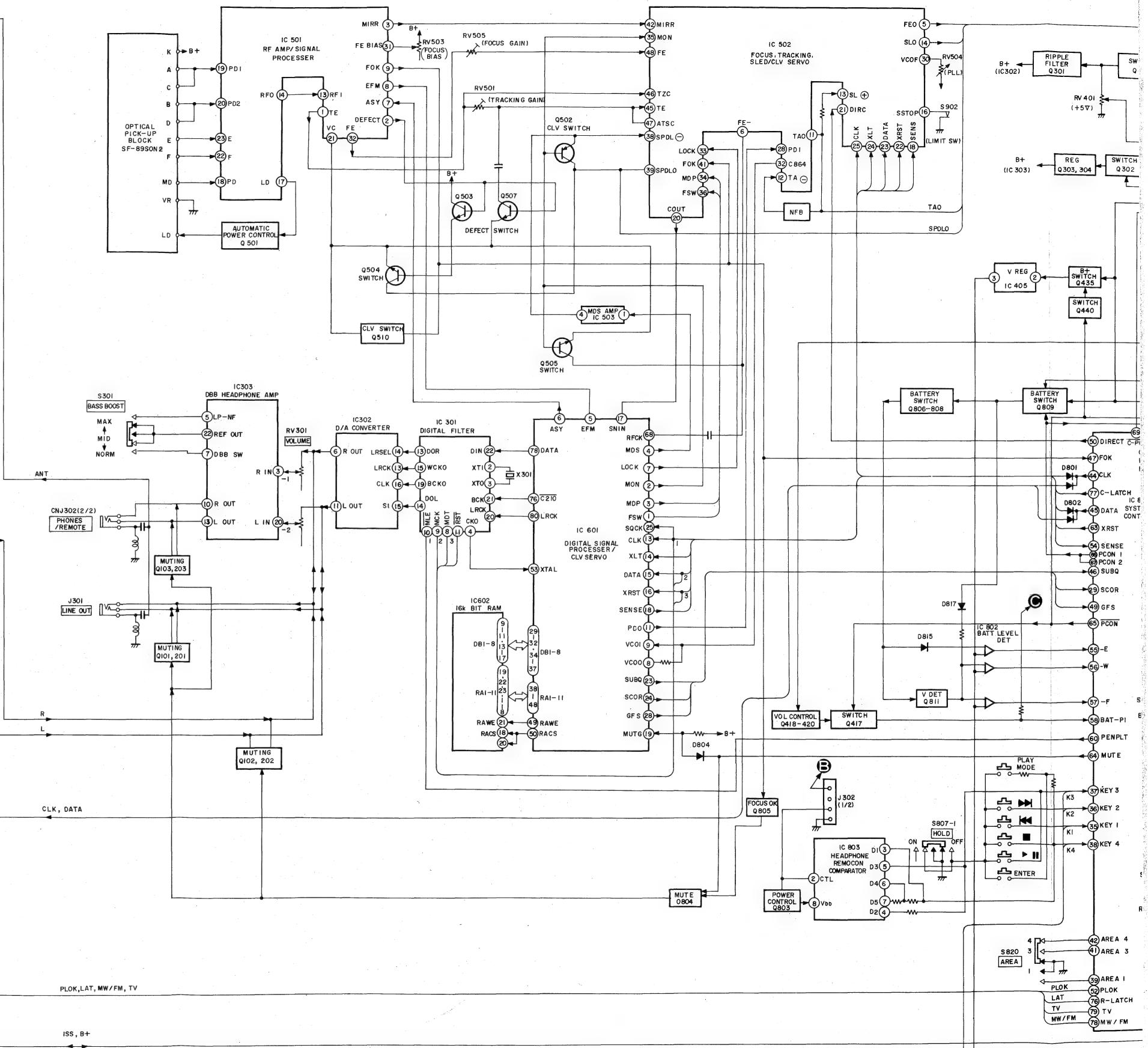
| NO. | COM. 1 | COM. 2 | COM. 3 | COM. 4  |
|-----|--------|--------|--------|---------|
| 1   |        |        |        | COM. 4  |
| 2   |        |        | COM. 3 |         |
| 3   |        | COM. 2 |        |         |
| 4   | COM. 1 |        |        |         |
| 5   | D      | C      | B      | A. E    |
| 6   | —      | REPEAT | CHARGE | PRESET  |
| 7   | 1f     | 1g     | 1e     |         |
| 8   | 1a     | 1b     | 1c     | 1d      |
| 9   | 2f     | 2g     | 2e     |         |
| 10  | 2a     | 2b     | 2c     | 2d      |
| 11  | AM     | FM     | TV     | 1       |
| 12  | 3b     | 3g     | 3c     | ALL     |
| 13  | 4f     | 4g     | 4e     |         |
| 14  | 4a     | 4b     | 4c     | 4d      |
| 15  | 5f     | 5g     | 5e     |         |
| 16  | 5a     | 5b     | 5c     | 5d      |
| 17  |        | :      | .      | B       |
| 18  | 6f     | 6g     | 6e     |         |
| 19  | 6a     | 6b     | 6c     | 6d      |
| 20  | 7f     | 7g     | 7e     |         |
| 21  | 7a     | 7b     | 7c     | 7d      |
| 22  | KHz    | MHz    | REMAIN | SHUFFLE |
| 23  |        | MEM    | RMS    | A -     |

#### 4-2. BLOCK DIAGRAM

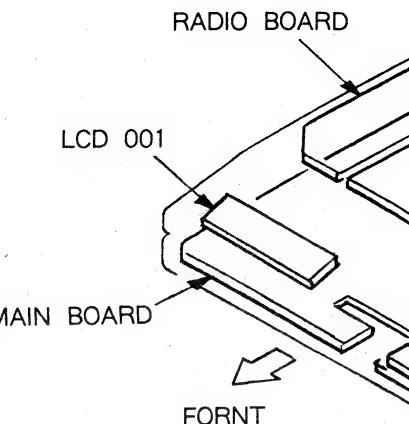
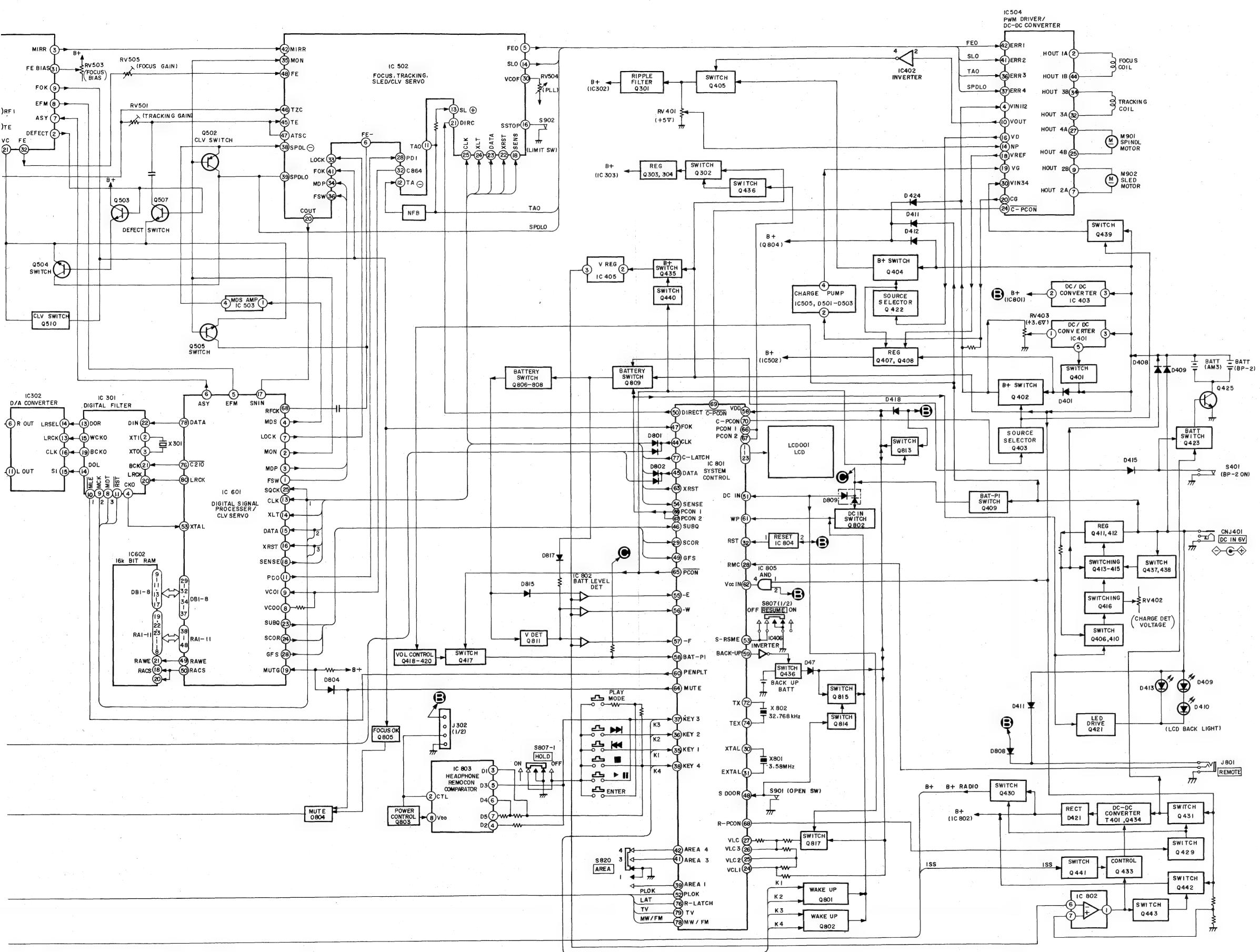


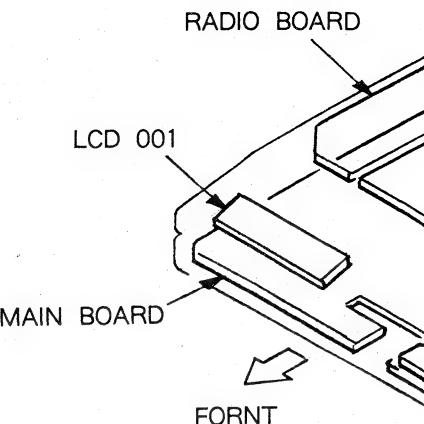
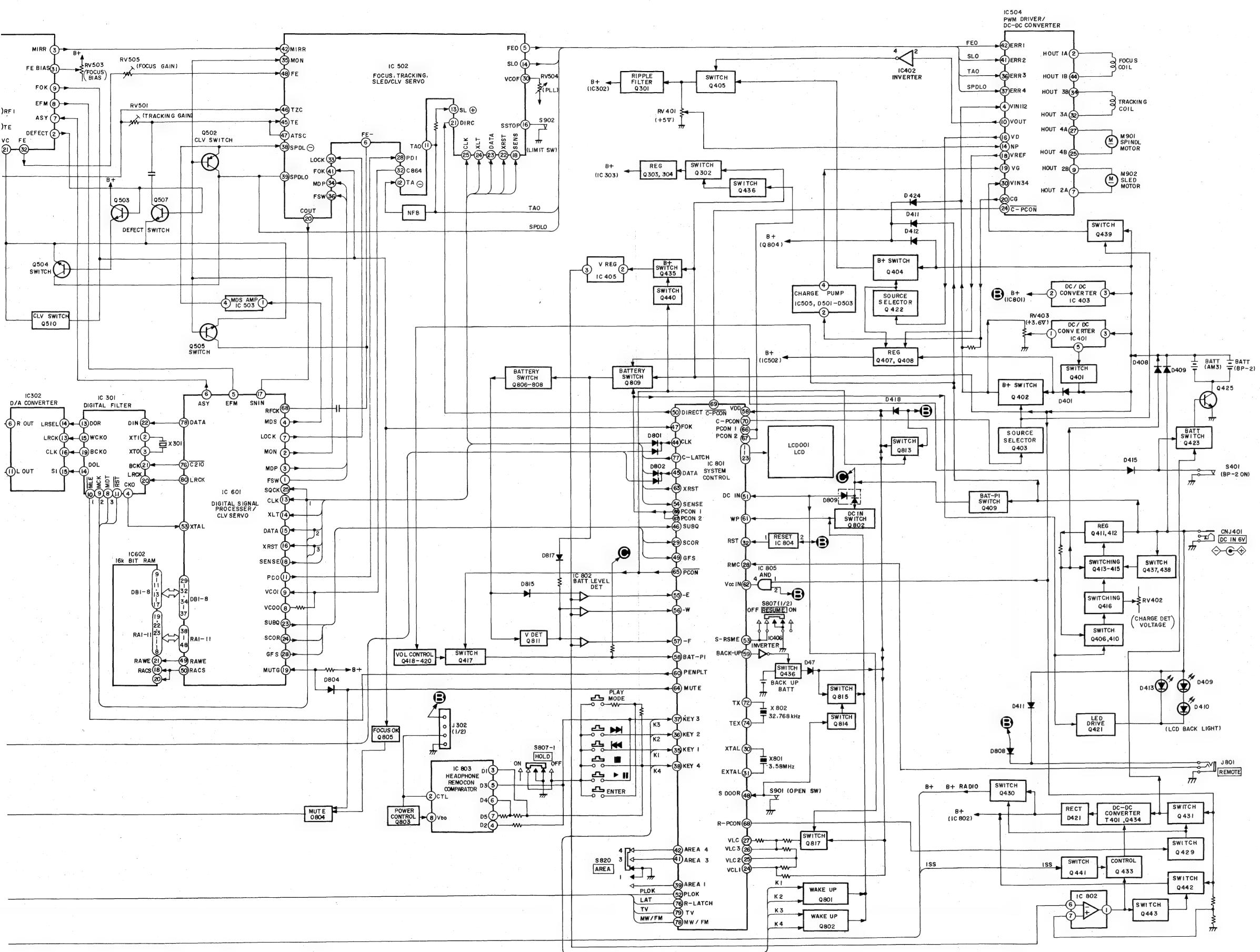
16

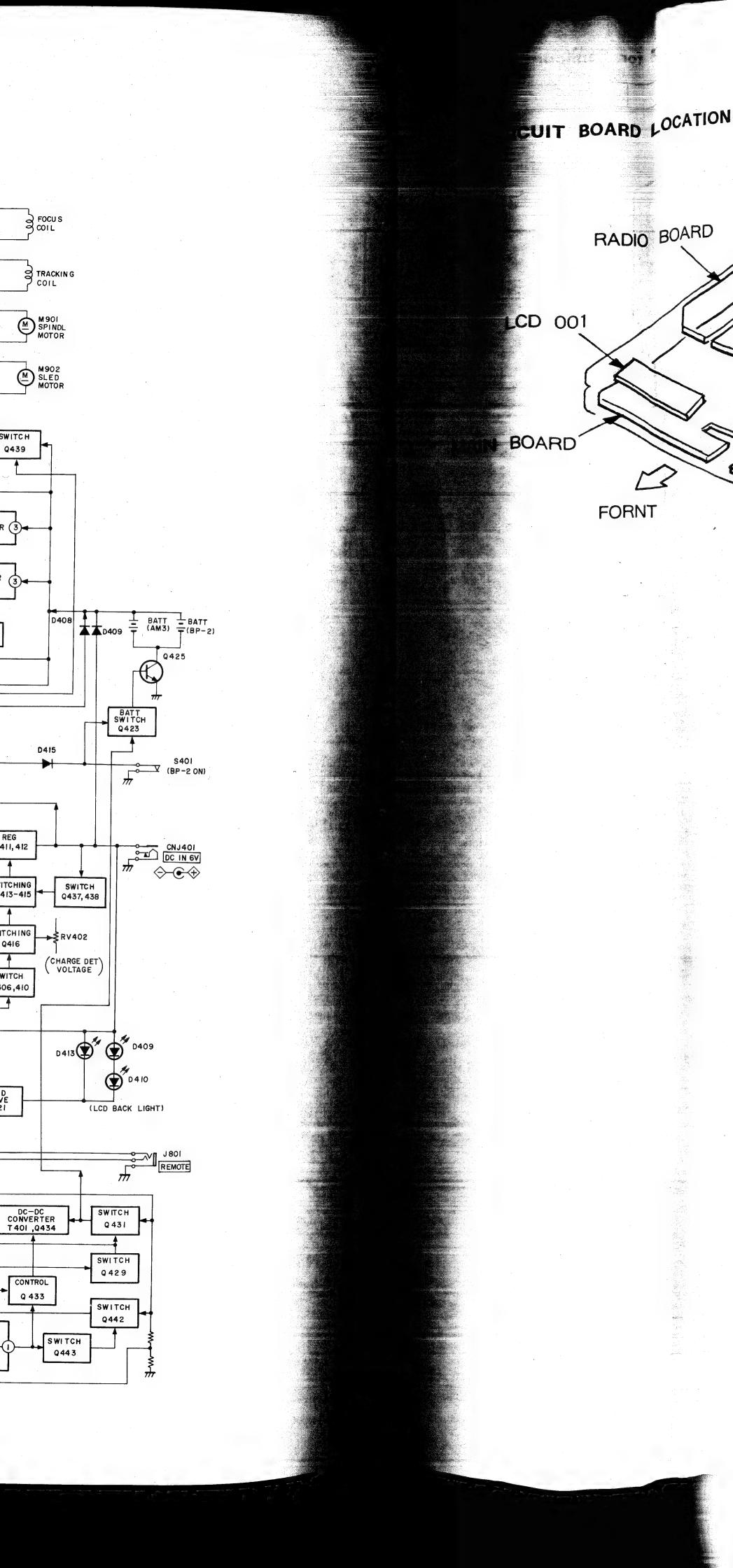
-13-



-14-

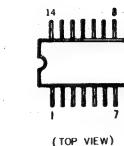




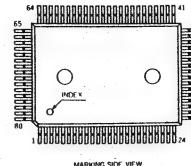


**4-4. SEMICONDUCTOR LEAD LAYOUT**

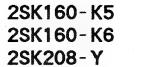
BA10339F  
CXD118M



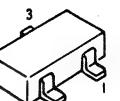
CXP5078-055Q



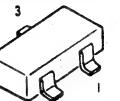
2SK160-K5  
2SK160-K6  
2SK208-Y



1SS226



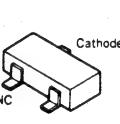
KV1560  
MA152WK  
SVC203CP



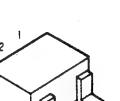
RB411D  
RD10M-B2  
SB01-05CP



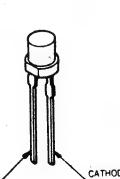
SB10-05PCP



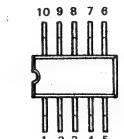
RB471E



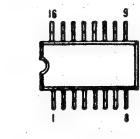
SEL2913K-D



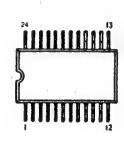
LA4533M



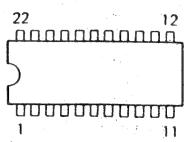
BA1362FS  
UPD6376



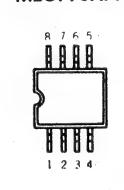
CX20111-L



BA3570F



BA3818F-SY  
TA7358F-N  
MB3776APF

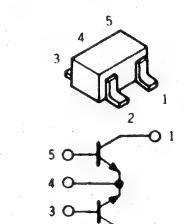


DTA114TK  
DTA124EK  
DTC114EK  
DTC124EK  
DTC144WK  
RN104  
2SA1037K-QR  
2SA624-BV4  
2SB624-BV345  
2SB1218A-QRS  
2SB1295-UL6  
2SC1623  
2SC2223-F14  
2SC2412K-QR  
2SC2712  
2SC2713  
2SC4177  
2SC4178  
2SC4718-F14  
2SD596  
2SD1328-T  
2SD1731K-R

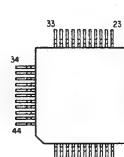
SM5840AS



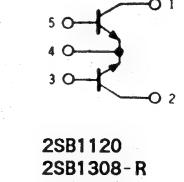
FMW7  
XN1216



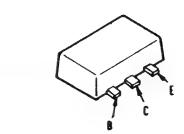
MPC1715FJ



2SB1120



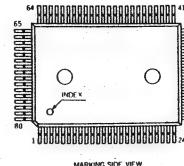
2SB1308-R  
2SD1963-Q+R



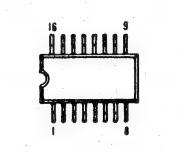
FMG8



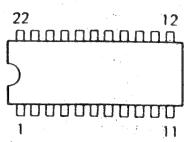
2SD999CLK



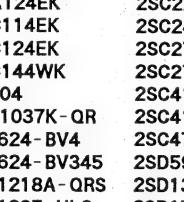
FMS1  
XN1401



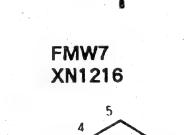
RB411D  
RD10M-B2  
SB01-05CP



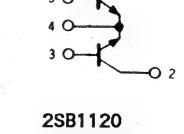
2SB1182F5-Q



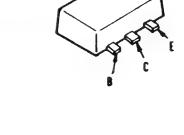
RB471E



SEL2913K-D



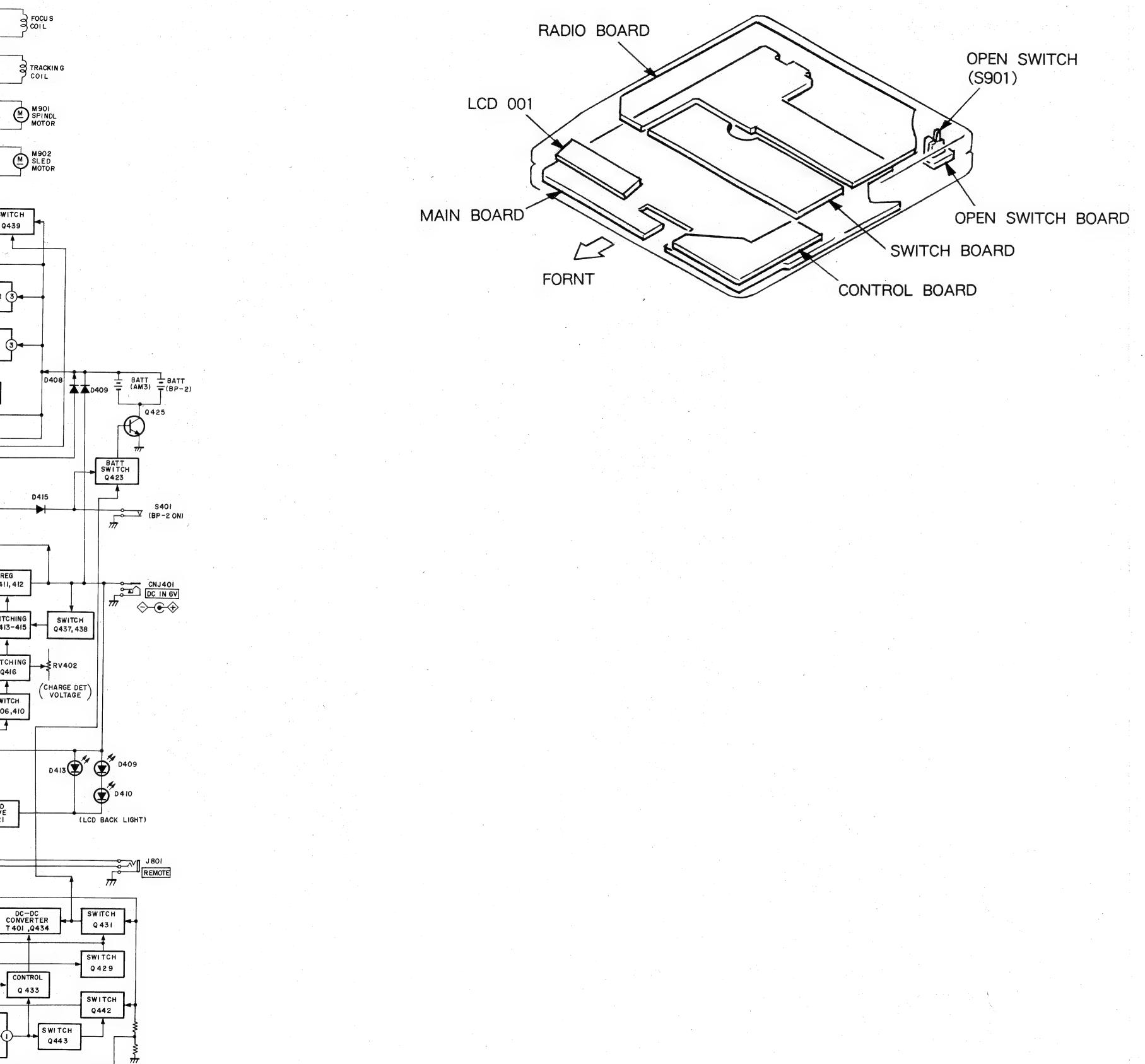
SB10-05PCP



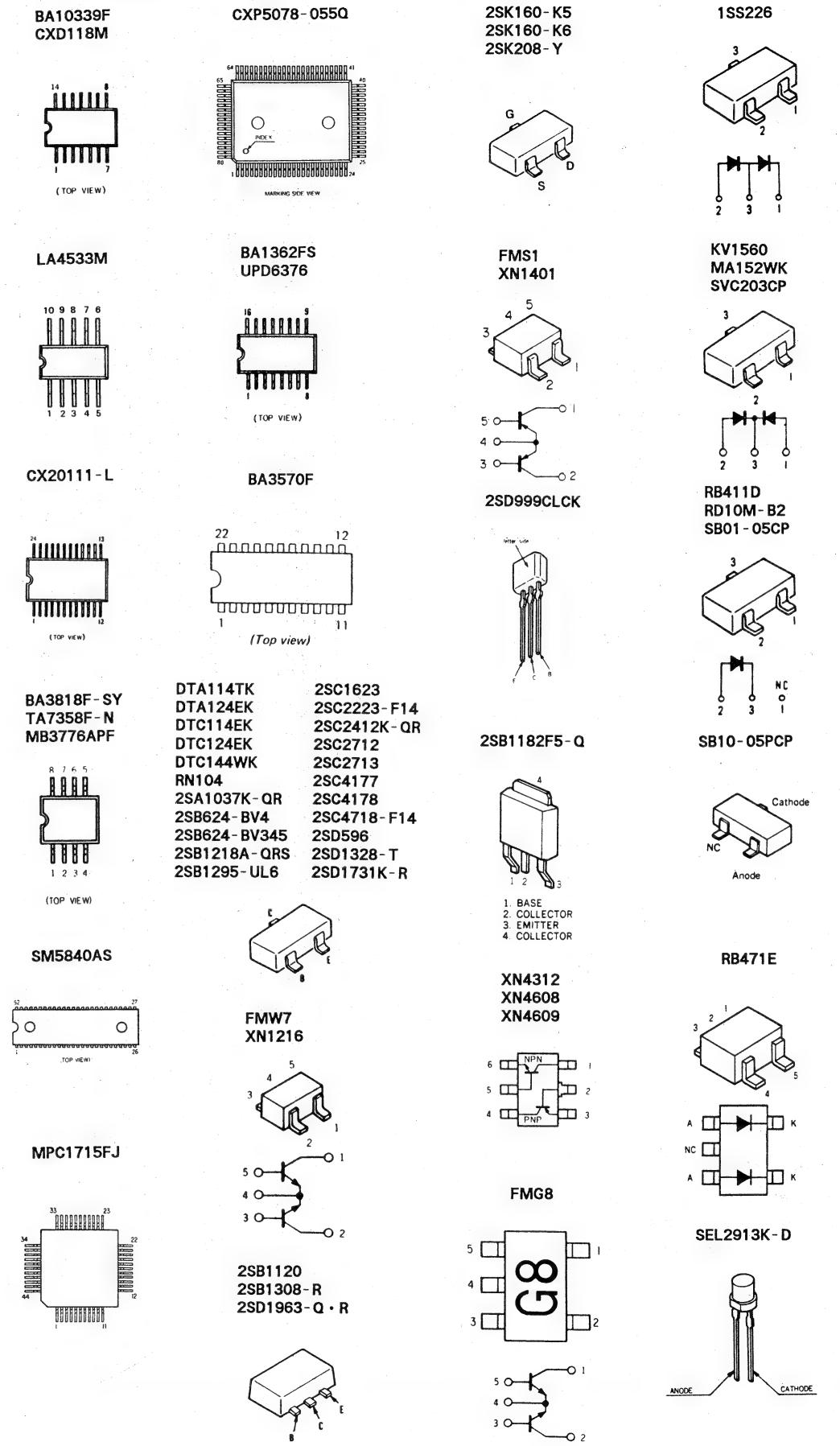
RB411D  
RD10M-B2  
SB01-05CP



#### 4-3. CIRCUIT BOARD LOCATION



#### 4-4. SEMICONDUCTOR LEAD LAYOUT

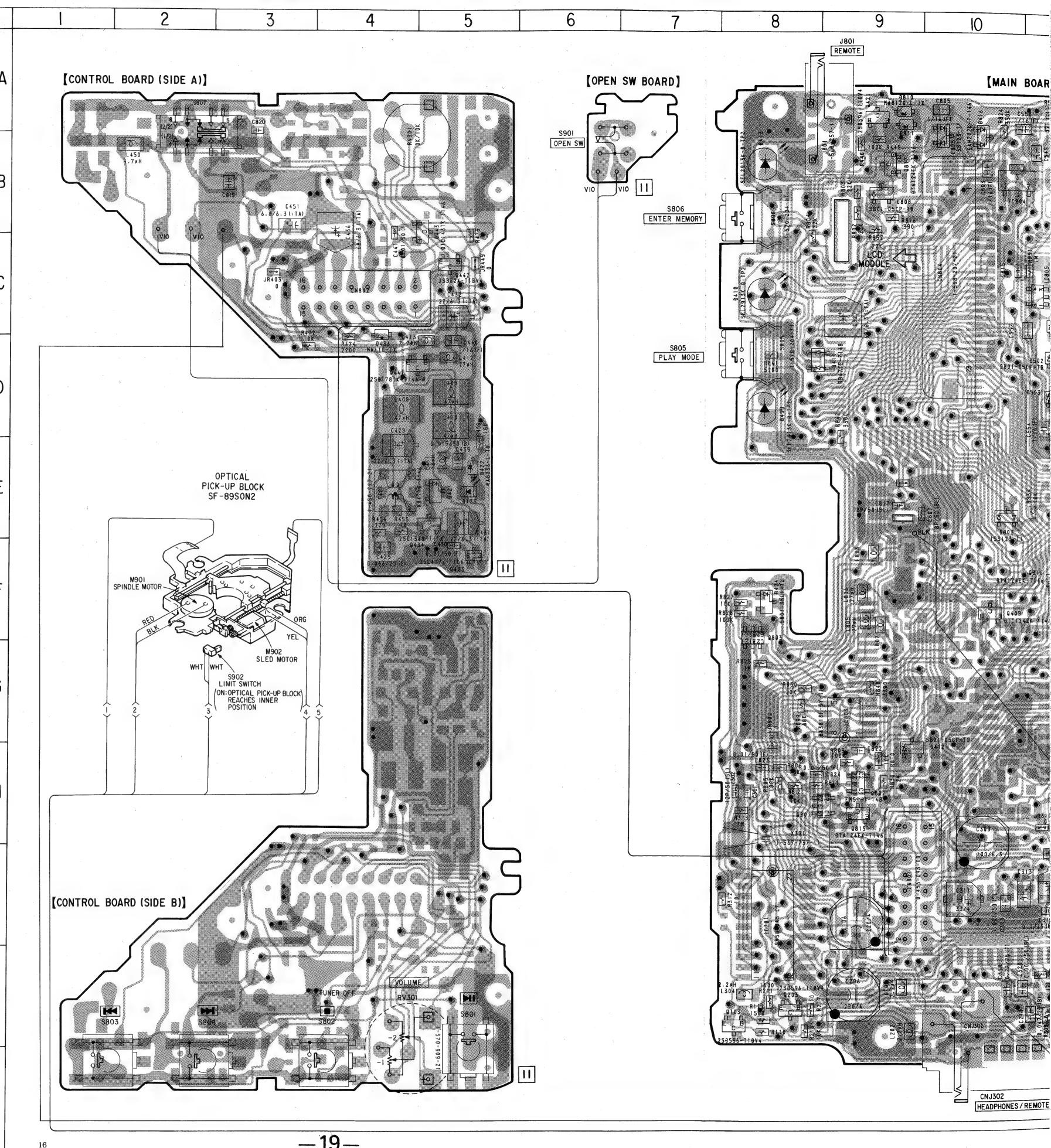


## • Semiconductor Location

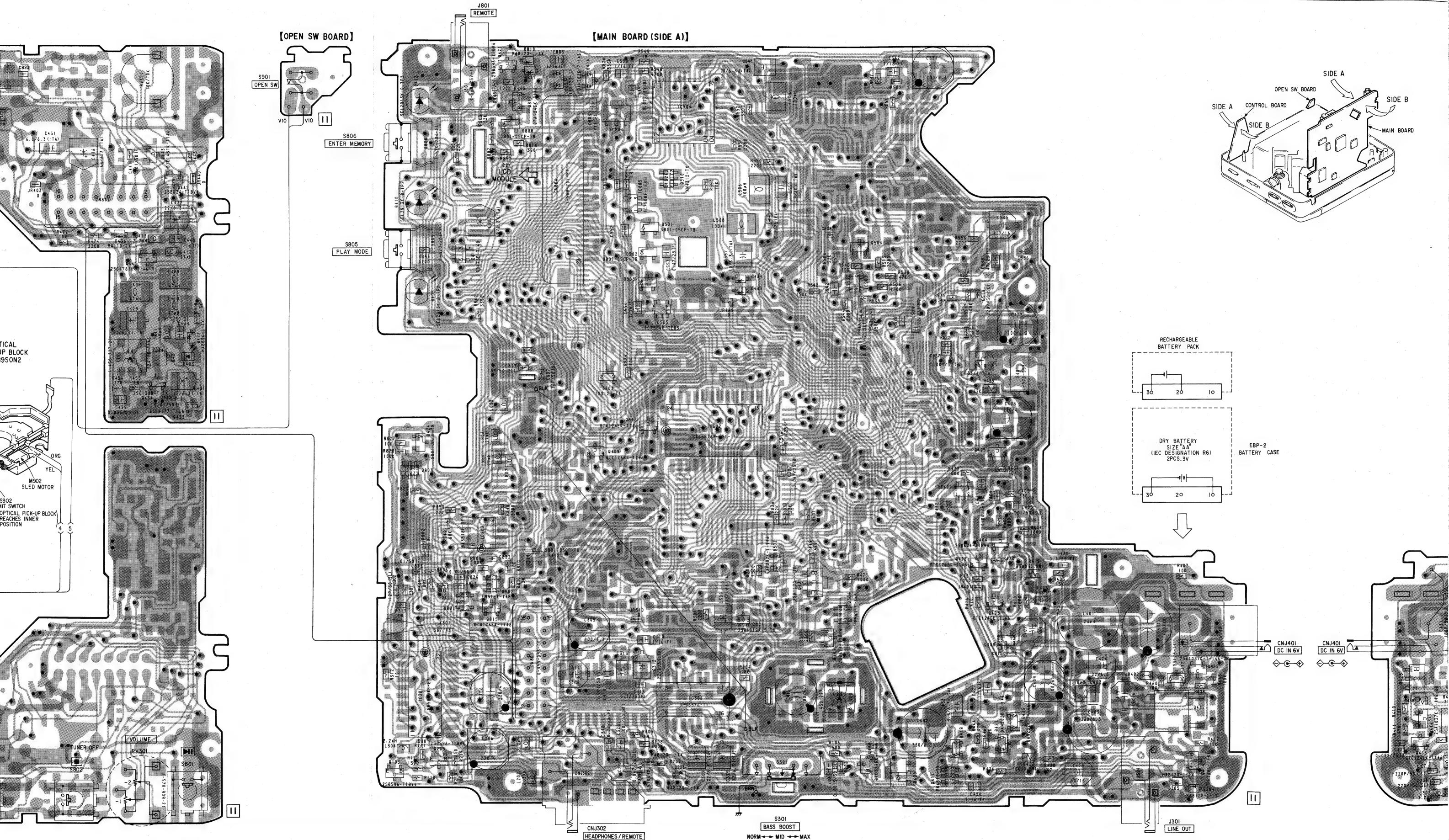
| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D202     | J-11     | IC805    | C-11     |
| D203     | J-11     | Q101     | J-25     |
| D204     | K-18     | Q102     | H-26     |
| D205     | K-18     | Q103     | J-8      |
| D302     | H-12     | Q201     | J-26     |
| D303     | J-29     | Q202     | H-25     |
| D401     | I-22     | Q203     | J-8      |
| D402     | F-23     | Q301     | I-12     |
| D403     | H-26     | Q302     | H-25     |
| D404     | J-26     | Q303     | I-13     |
| D405     | I-21     | Q304     | H-13     |
| D407     | J-24     | Q401     | I-22     |
| D408     | K-14     | Q402     | J-22     |
| D409     | D-8      | Q403     | H-15     |
| D410     | C-8      | Q404     | G-15     |
| D411     | D-8      | Q405     | F-15     |
| D412     | H-9      | Q406     | J-22     |
| D413     | B-8      | Q407     | I-23     |
| D414     | H-22     | Q408     | I-15     |
| D415     | G-23     | Q409     | F-10     |
| D416     | B-10     | Q410     | J-22     |
| D417     | E-27     | Q411     | I-22     |
| D418     | E-28     | Q412     | J-18     |
| D419     | J-15     | Q413     | J-21     |
| D421     | E-5      | Q414     | J-18     |
| D422     | E-5      | Q415     | J-22     |
| D423     | E-5      | Q416     | J-21     |
| D424     | F-8      | Q417     | K-15     |
| D427     | J-15     | Q418     | J-23     |
| D430     | H-25     | Q419     | J-23     |
| D432     | I-18     | Q420     | J-23     |
| D433     | D-12     | Q421     | A-9      |
| D434     | D-12     | Q422     | H-15     |
| D435     | J-16     | Q423     | I-18     |
| D436     | D-4      | Q425     | I-21     |
| D437     | D-27     | Q429     | H-26     |
| D445     | E-28     | Q430     | H-27     |
| D501     | C-11     | Q430     | H-27     |
| D502     | D-11     | Q431     | H-13     |
| D503     | D-11     | Q432     | G-24     |
| D801     | G-29     | Q433     | E-5      |
| D802     | G-29     | Q434     | E-5      |
| D803     | E-10     | Q435     | J-23     |
| D804     | F-30     | Q436     | E-26     |
| D805     | B-10     | Q437     | J-24     |
| D807     | E-28     | Q438     | J-14     |
| D808     | B-9      | Q439     | H-23     |
| D809     | F-28     | Q440     | J-24     |
| D810     | A-9      | Q441     | D-4      |
| D811     | A-9      | Q442     | C-5      |
| D815     | H-28     | Q443     | B-4      |
| D816     | H-29     | Q501     | B-24     |
| D817     | H-28     | Q502     | D-25     |
|          |          | Q503     | D-25     |
| IC301    | I-8      | Q504     | D-14     |
| IC302    | I-11     | Q505     | F-24     |
| IC303    | I-28     | Q506     | D-24     |
| IC401    | G-23     | Q510     | C-11     |
| IC402    | G-15     | Q801     | H-8      |
| IC403    | J-26     | Q802     | H-9      |
| IC405    | I-23     | Q803     | G-8      |
| IC406    | D-27     | Q804     | I-30     |
| IC501    | C-25     | Q805     | F-25     |
| IC502    | E-24     | Q806     | I-27     |
| IC503    | D-14     | Q807     | I-27     |
| IC504    | B-11     | Q808     | H-28     |
| IC505    | E-11     | Q809     | H-28     |
| IC601    | G-27     | Q811     | H-27     |
| IC602    | F-12     | Q813     | E-27     |
| IC801    | D-29     | Q814     | H-30     |
| IC802    | G-28     | Q815     | H-9      |
| IC803    | G-9      | Q816     | F-11     |
| IC804    | B-10     | Q817     | B-9      |

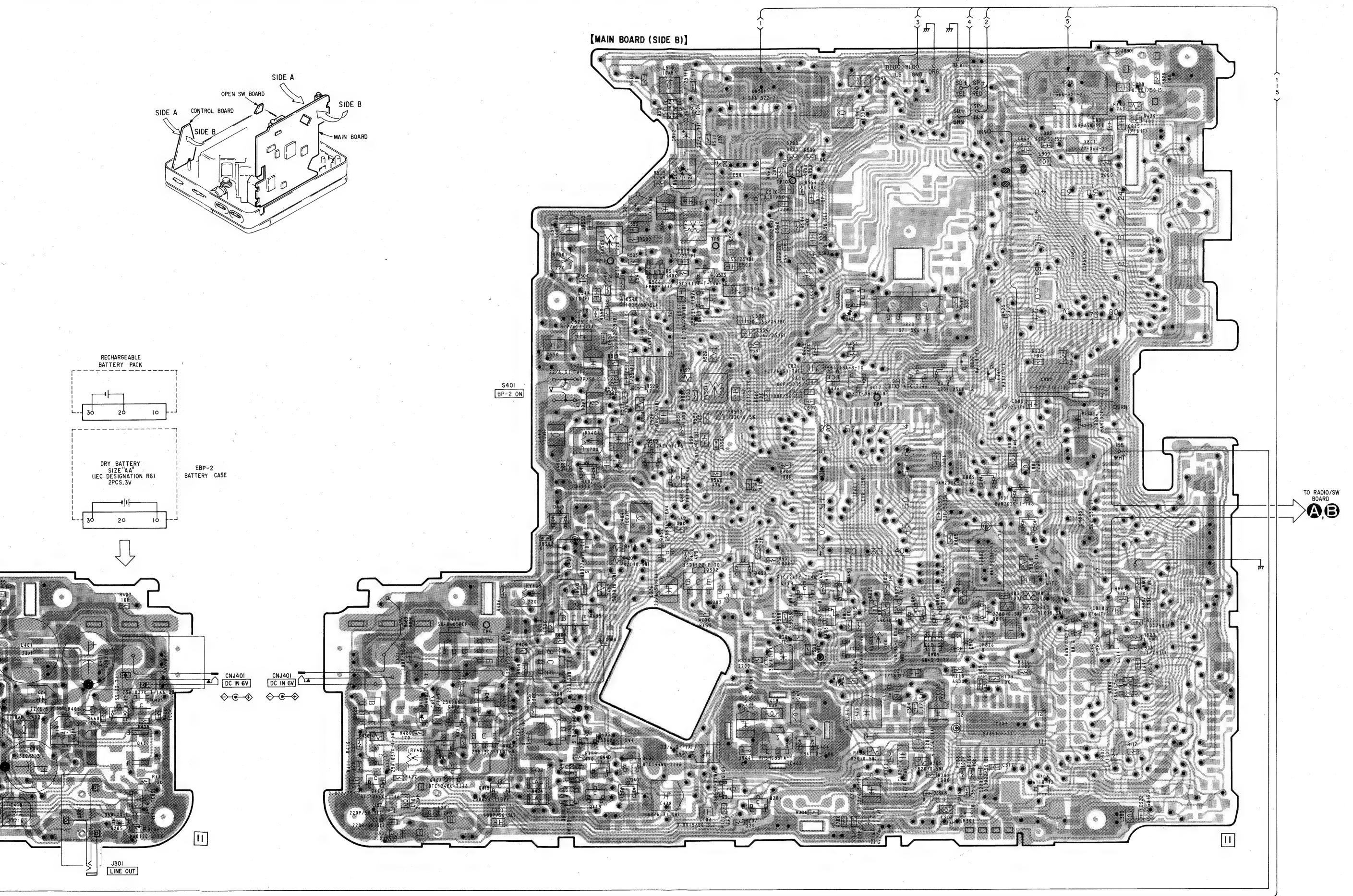
## Note on Mounting Diagram:

- : parts mounted on the conductor side.
- : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

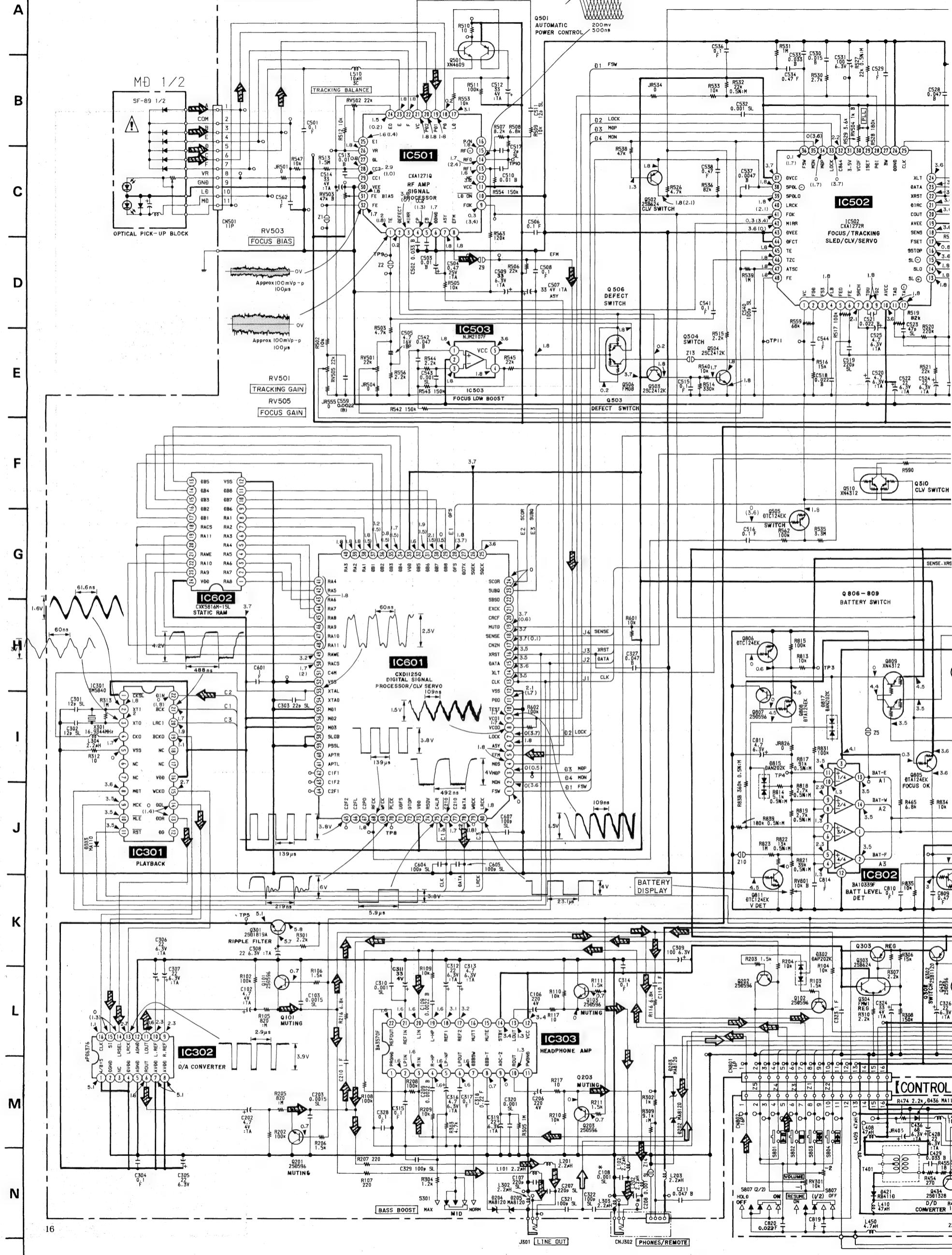


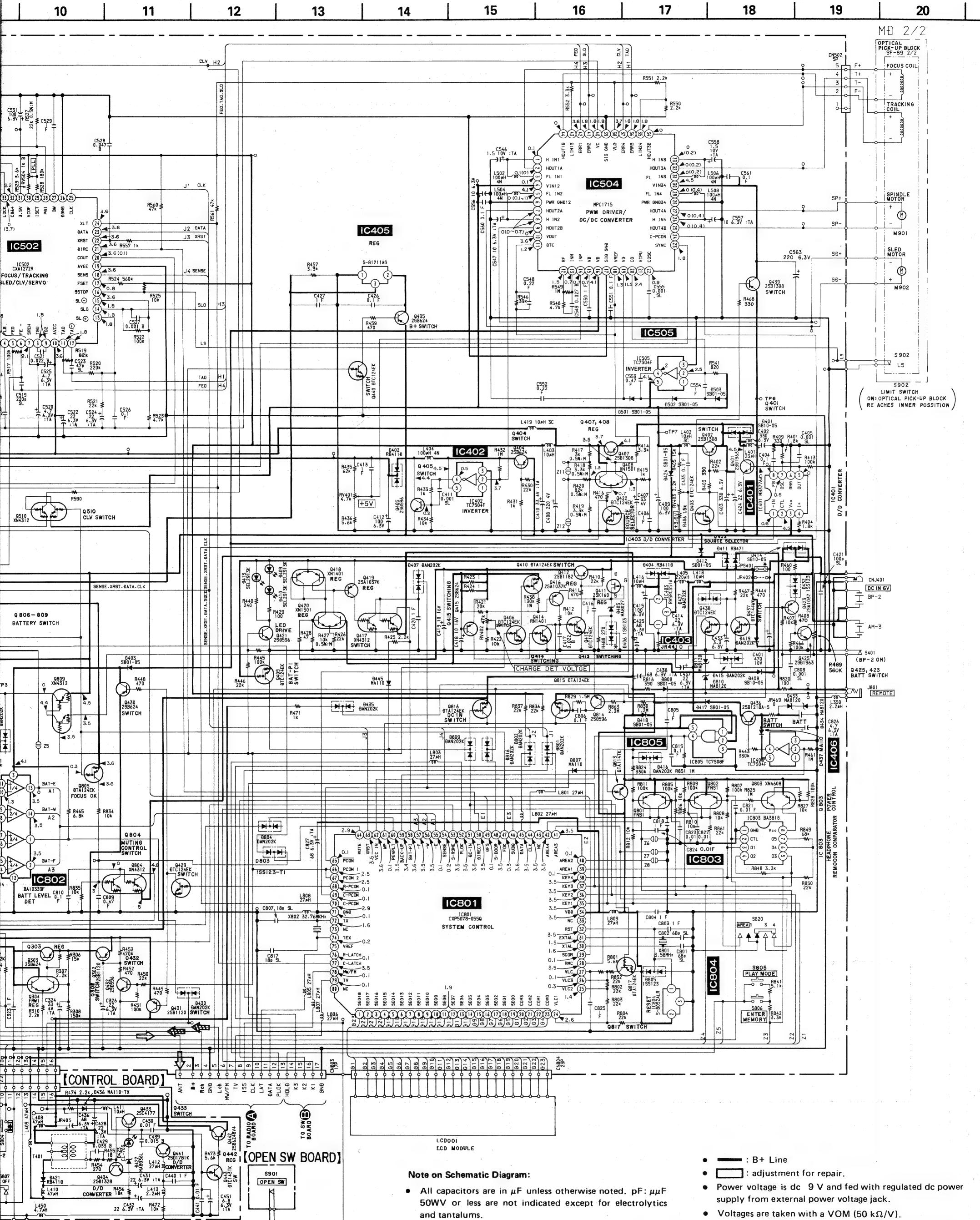
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

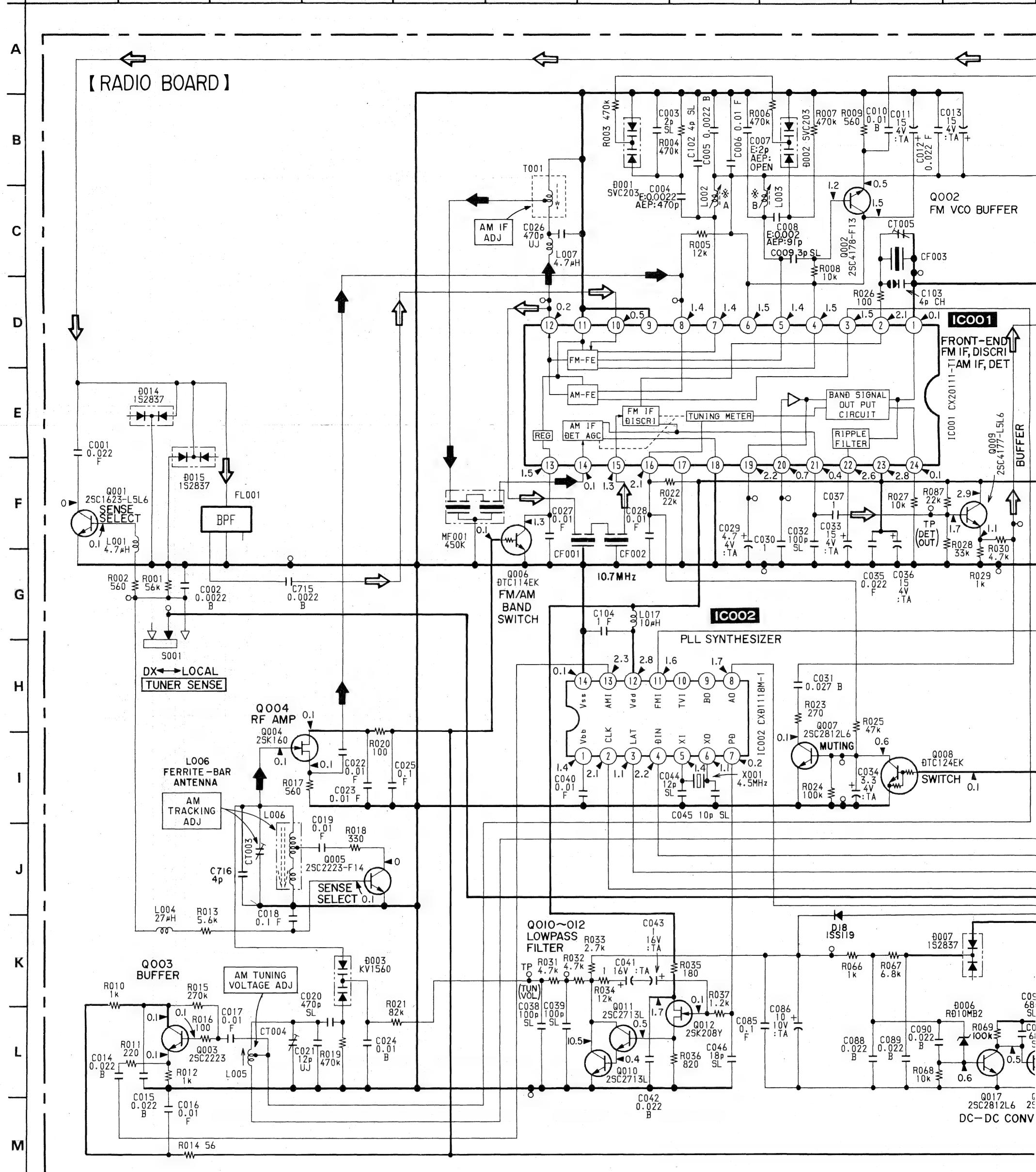


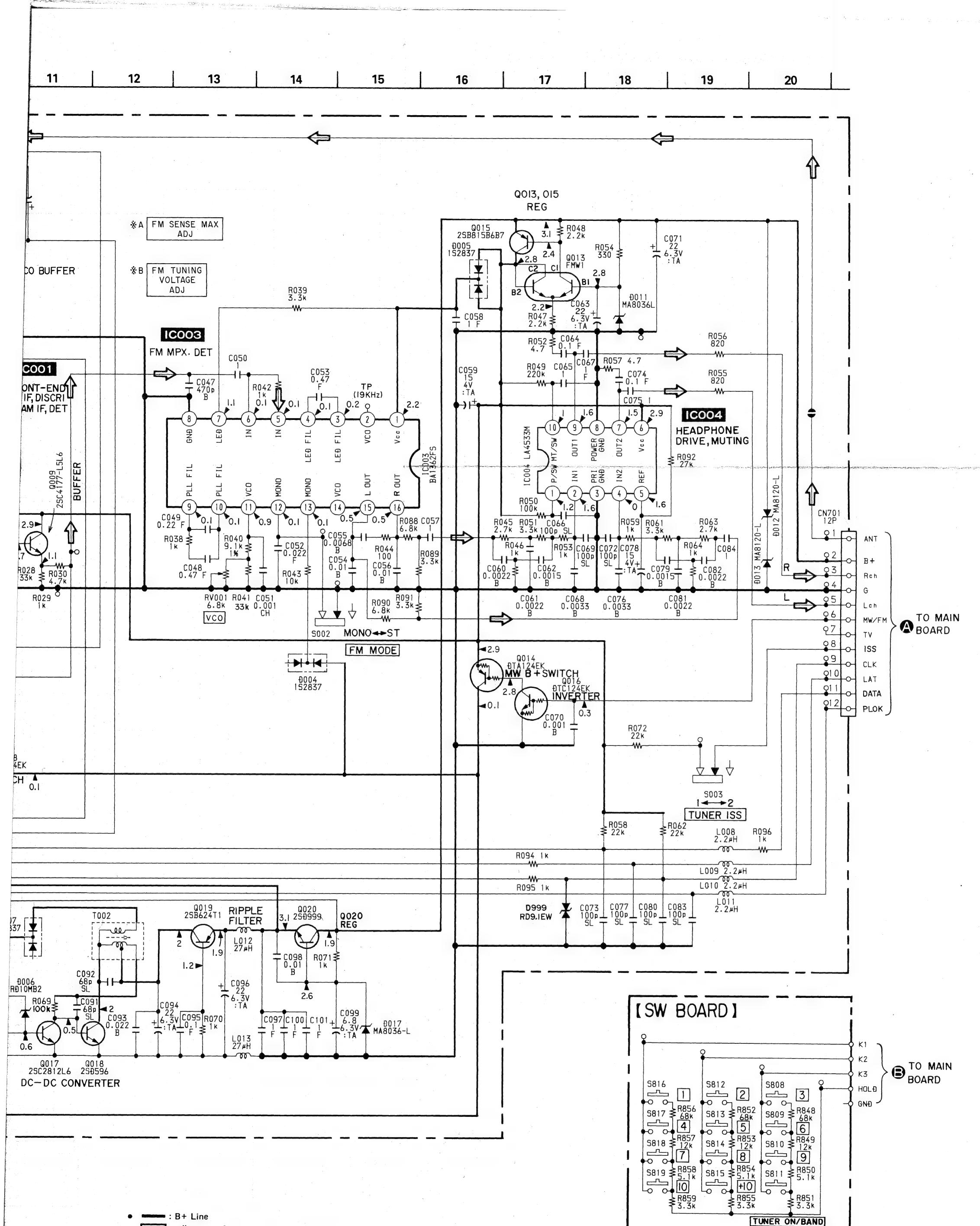


## 【MAIN BOARD】







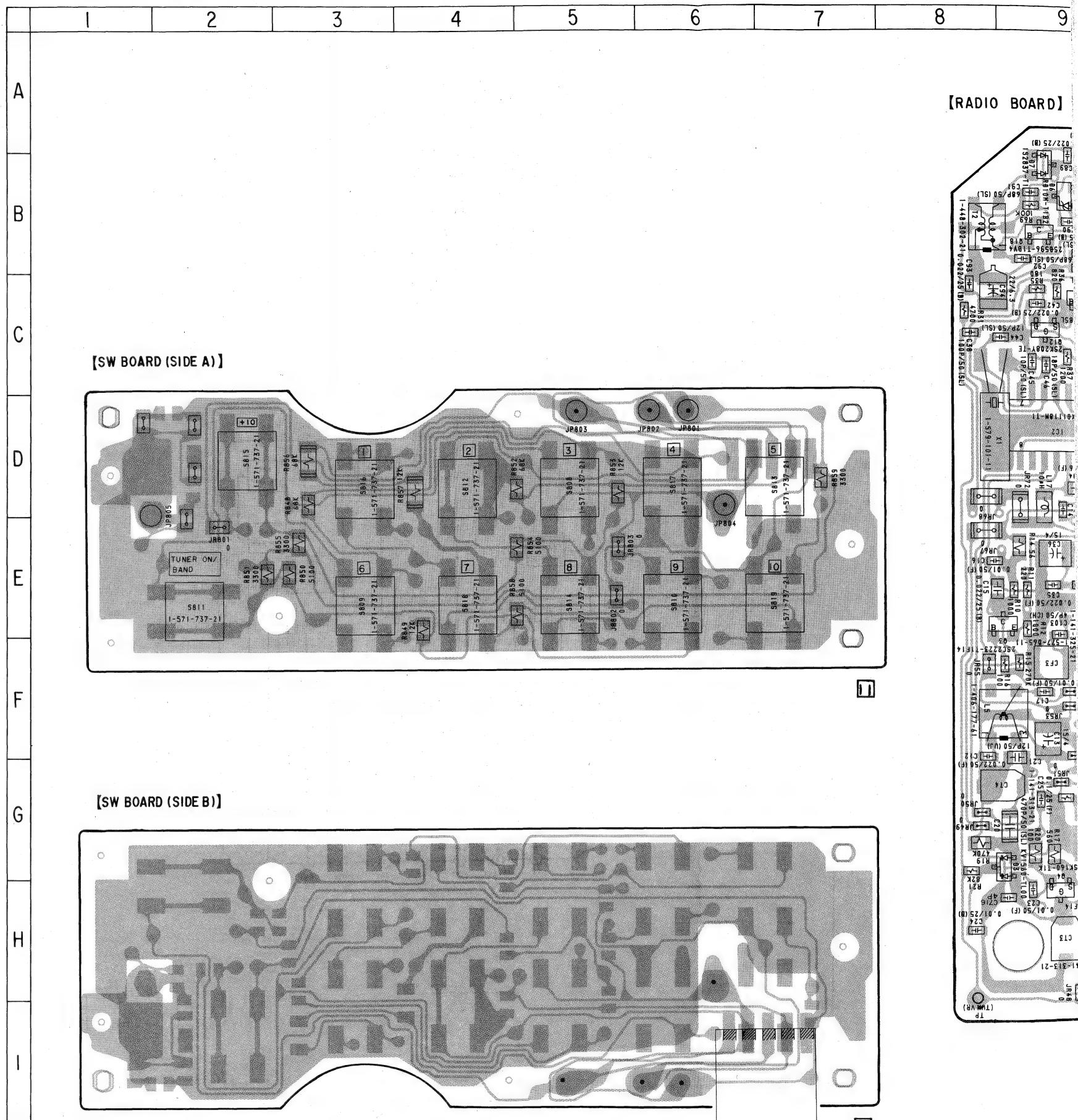


- : B+ Line
- : adjustment for repair.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack.
- Voltages are taken with a VOM (50 k $\Omega$ /V). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - : FM
  - : AM

| Ref. No. | Location |
|----------|----------|
| D001     | C-14     |
| D002     | C-16     |
| D003     | C-16     |
| D004     | C-11     |
| D005     | C-10     |
| D006     | H-16     |
| D007     | H-16     |
| D011     | B-11     |
| D012     | B-11     |
| D013     | B-11     |
| D014     | D-11     |
| D015     | D-12     |
| D017     | E-8      |
| D018     | G-15     |
| D999     | H-15     |
| IC001    | E-15     |
| IC002    | F-16     |
| IC003    | D-10     |
| IC004    | D-9      |
| Q001     | C-12     |
| Q002     | D-15     |
| Q003     | E-16     |
| Q004     | B-16     |
| Q005     | B-16     |
| Q006     | E-14     |
| Q007     | E-10     |
| Q008     | E-11     |
| Q009     | F-13     |
| Q010     | G-15     |
| Q011     | G-16     |
| Q012     | G-16     |
| Q013     | C-10     |
| Q014     | C-10     |
| Q015     | C-10     |
| Q016     | C-9      |
| Q017     | H-16     |
| Q018     | H-16     |
| Q019     | H-15     |
| Q020     | E-9      |

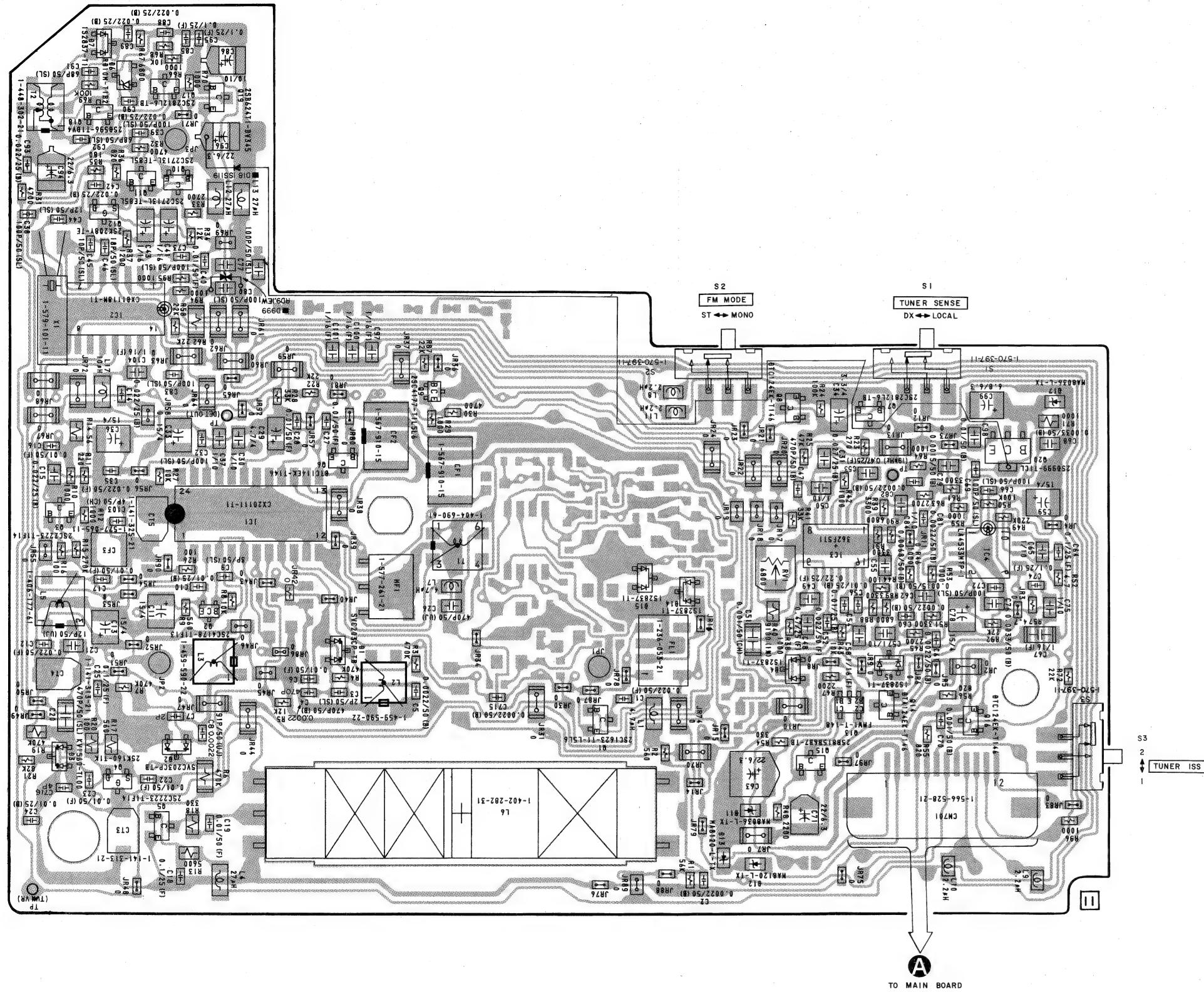
#### Note on Mounting Diagram:

- : parts mounted on the conductor side.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.



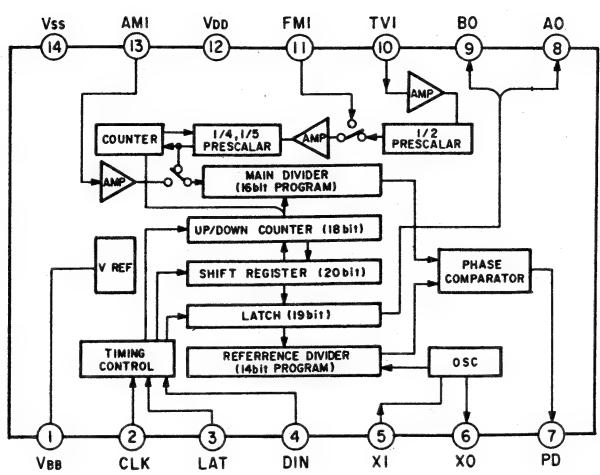
—29—

**[RADIO BOARD]**

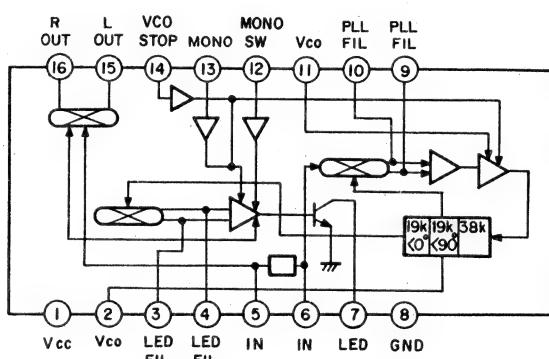


#### 4-9. IC BLOCK DIAGRAM

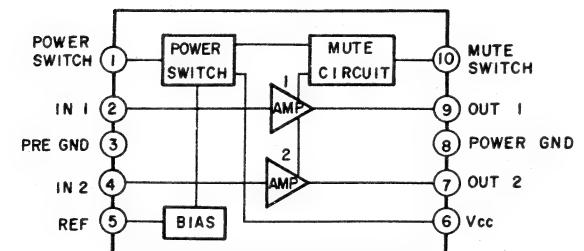
IC002 CXD1118M-1



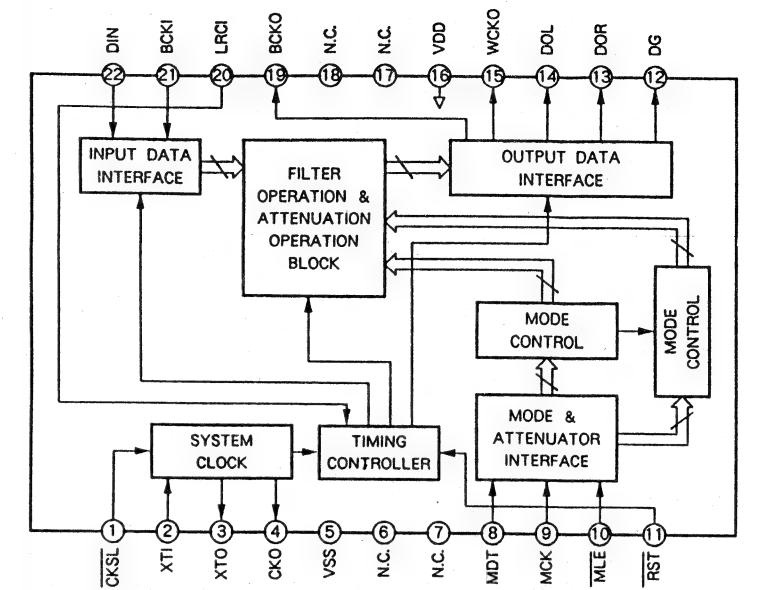
IC003 BA1362FS



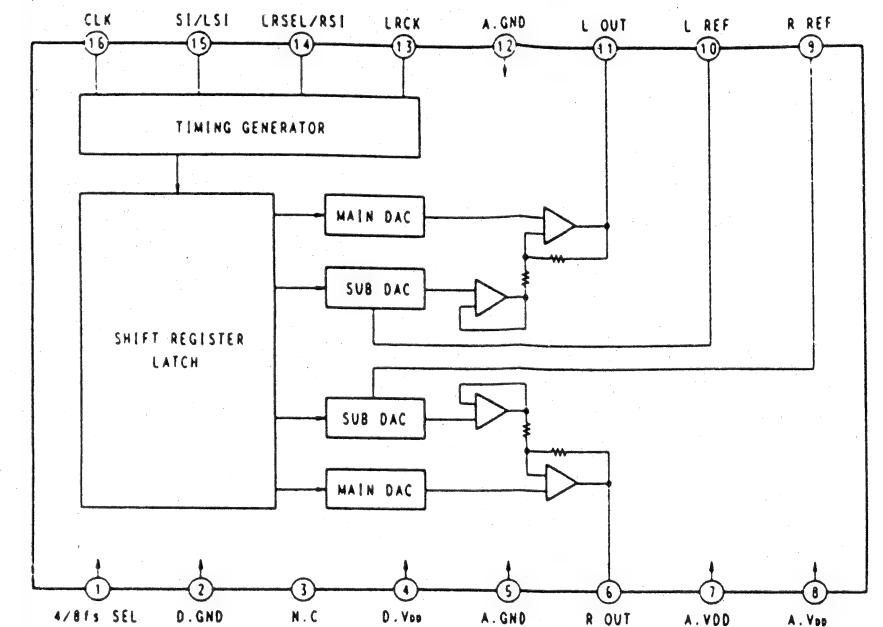
IC004 LA4533M



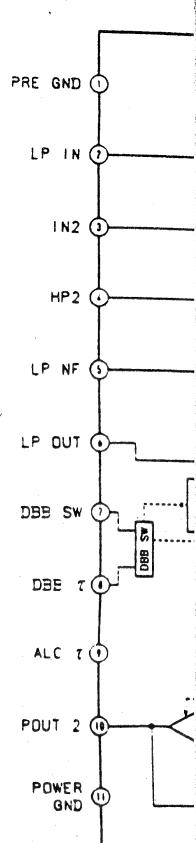
IC301 SM5840AS



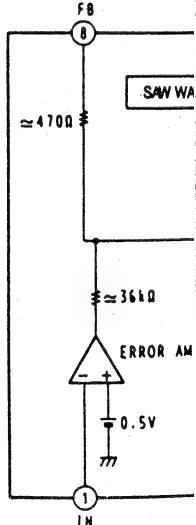
IC302 μPD6376



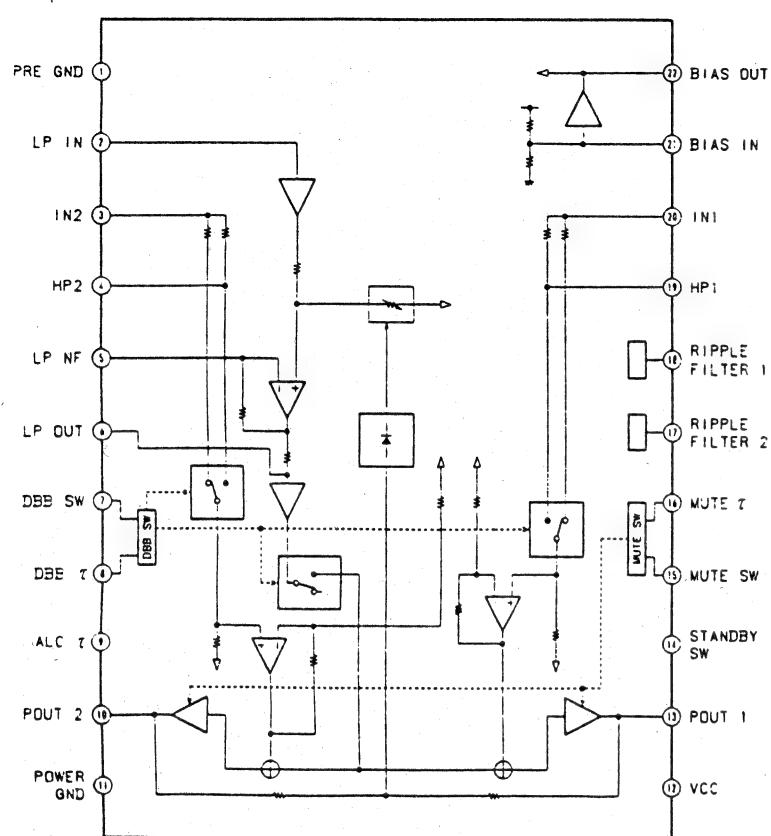
IC303 BA3570B



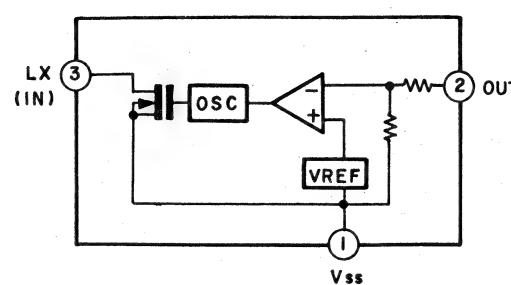
IC401 MB3776A



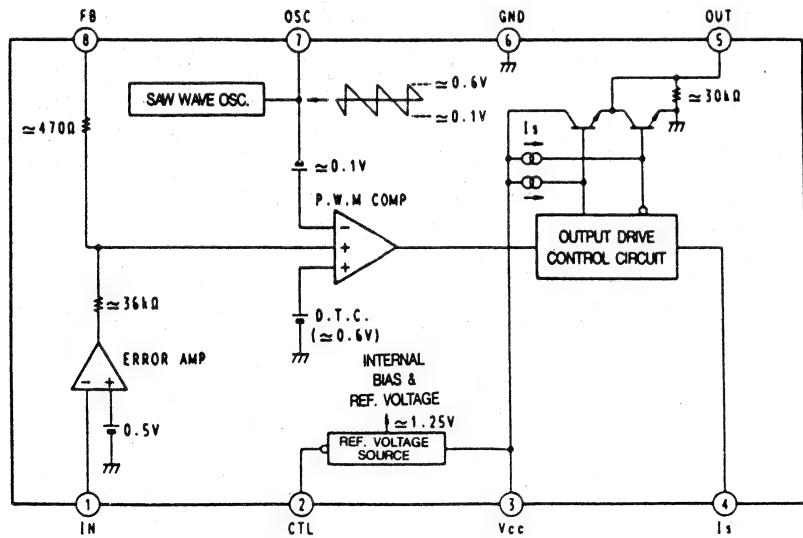
IC303 BA3570F



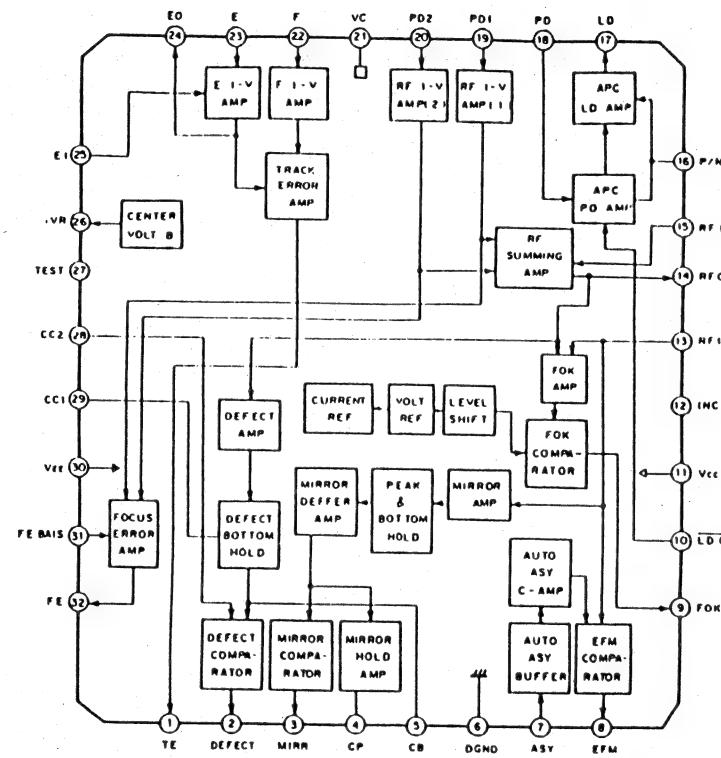
IC403 RH5RC351A



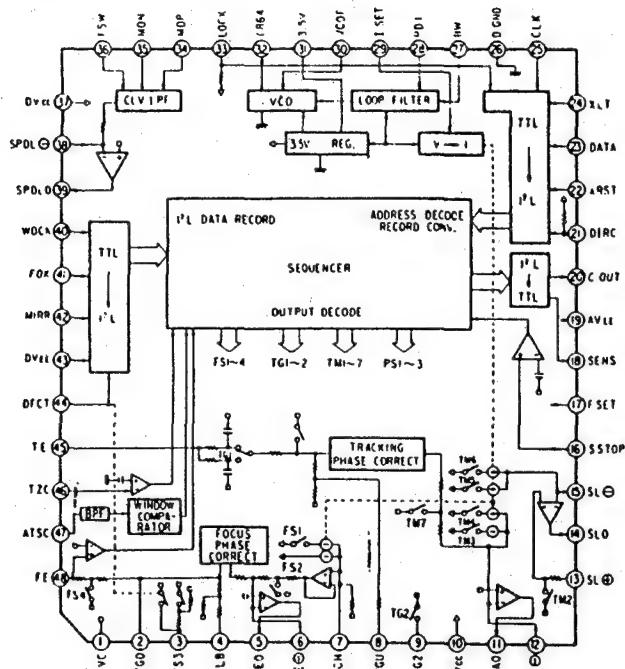
IC401 MB3776APF



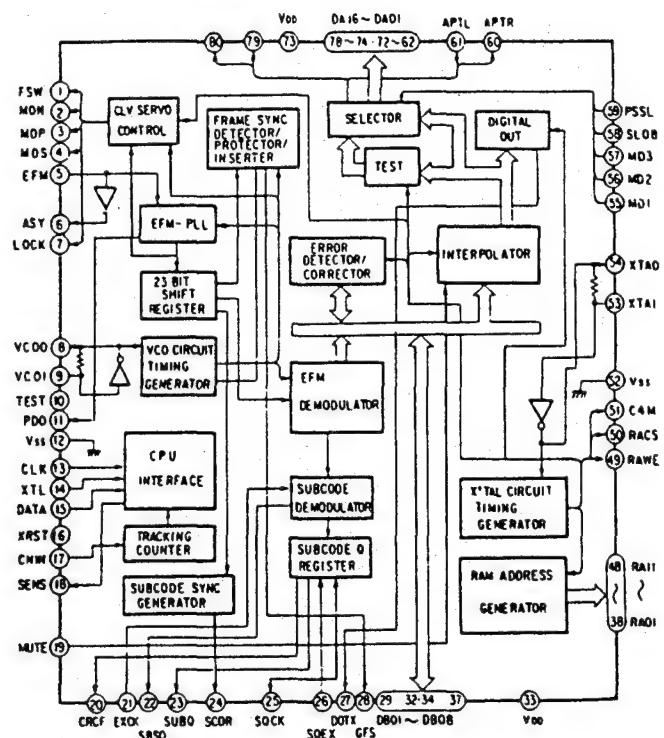
IC501 CXA1271Q



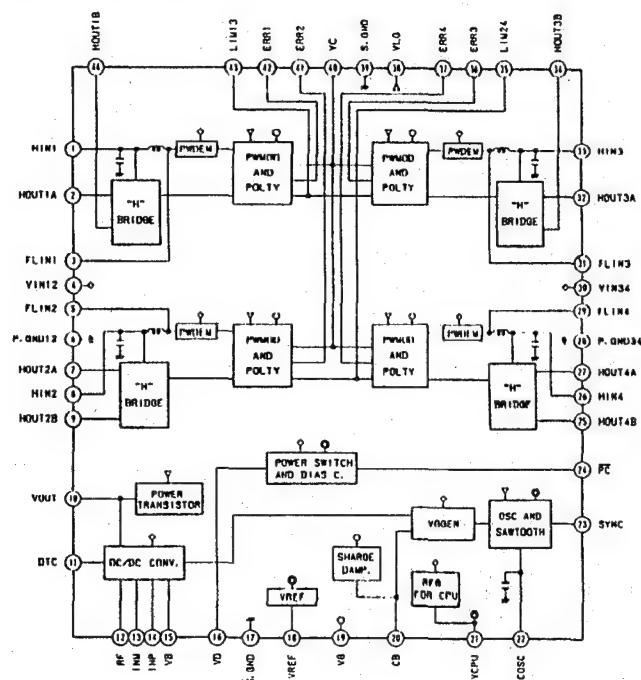
IC502 CXA1272Q



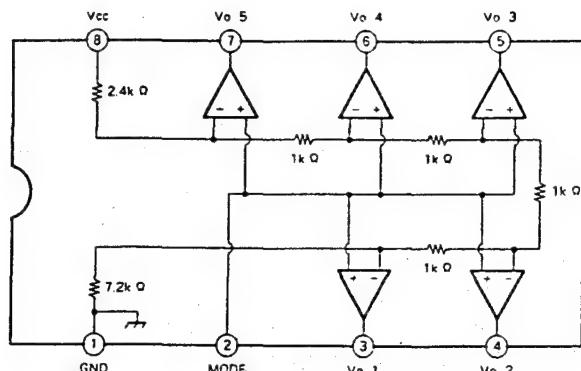
IC601 CXD1125Q



IC504 MPC1715



IC803 BA3818F-SY



## SECTION 5

### EXPLODED VIEWS

## NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked “★” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

- Color Indication of Appearance Parts Example:

(RED) ... KNOB, BALANCE (WHITE)



Cabinet's Color



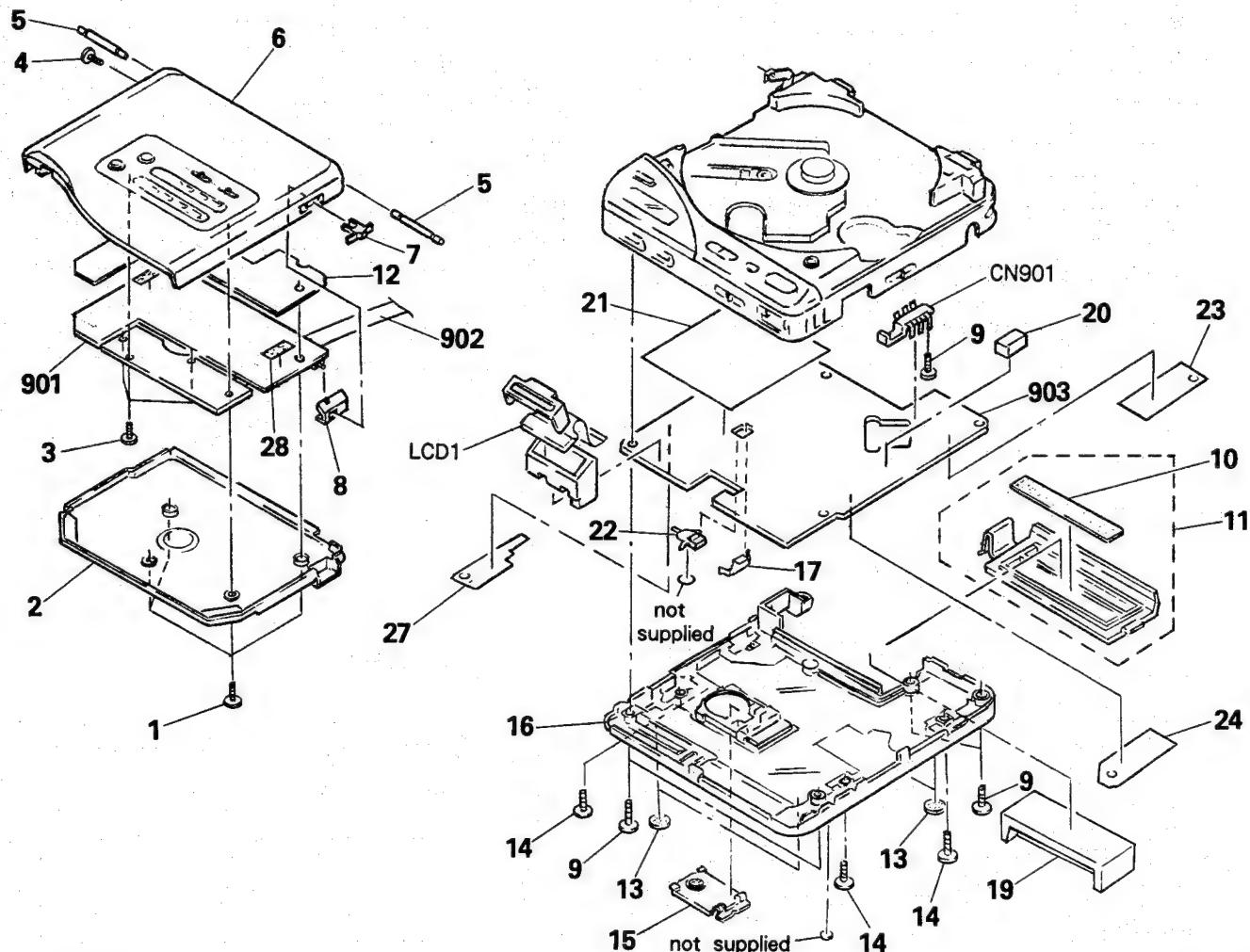
Parts' Color

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité.

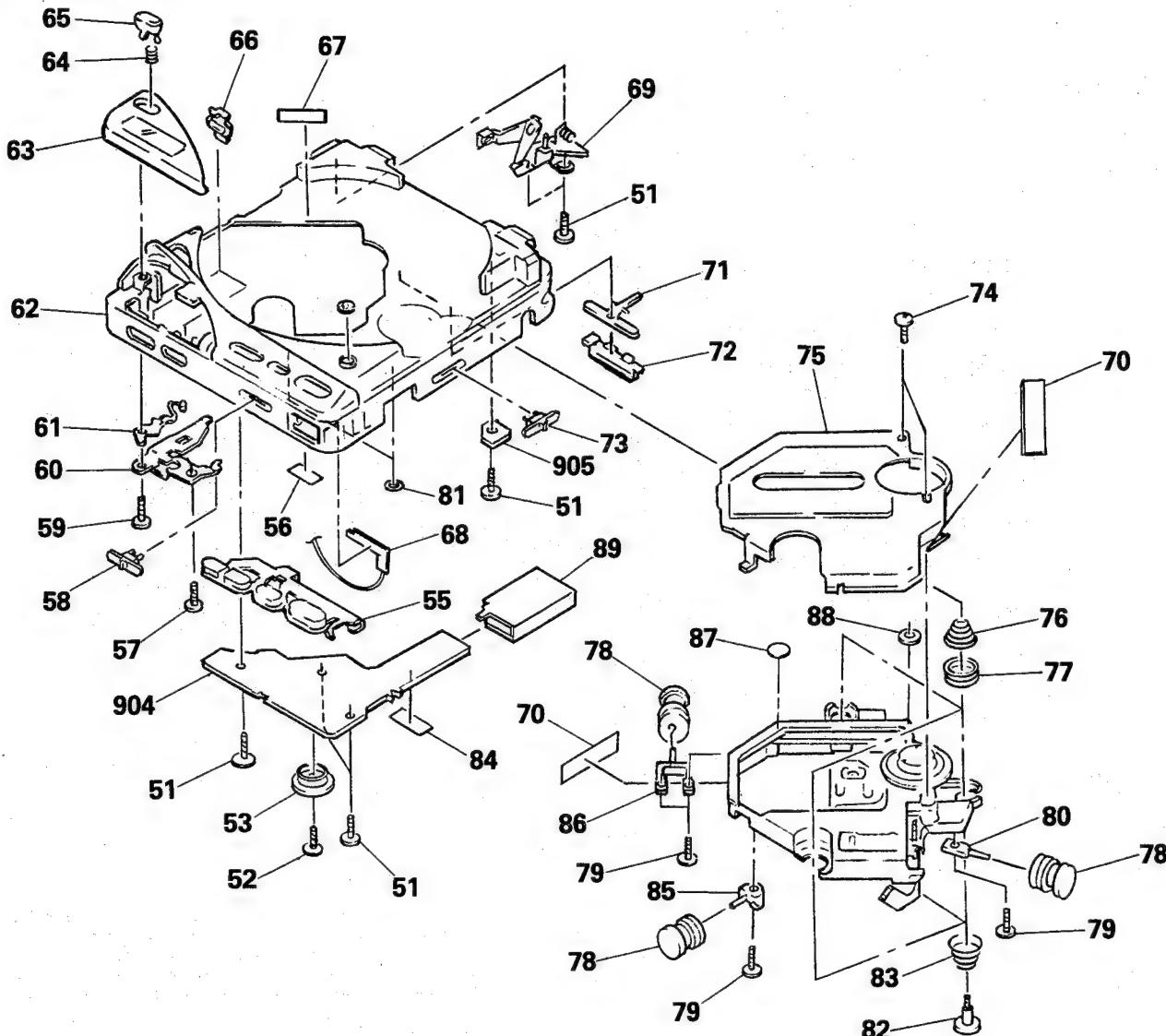
Ne les remplacer que par une pièce portant le numéro spécifié.

## 5-1. CABINET SECTION



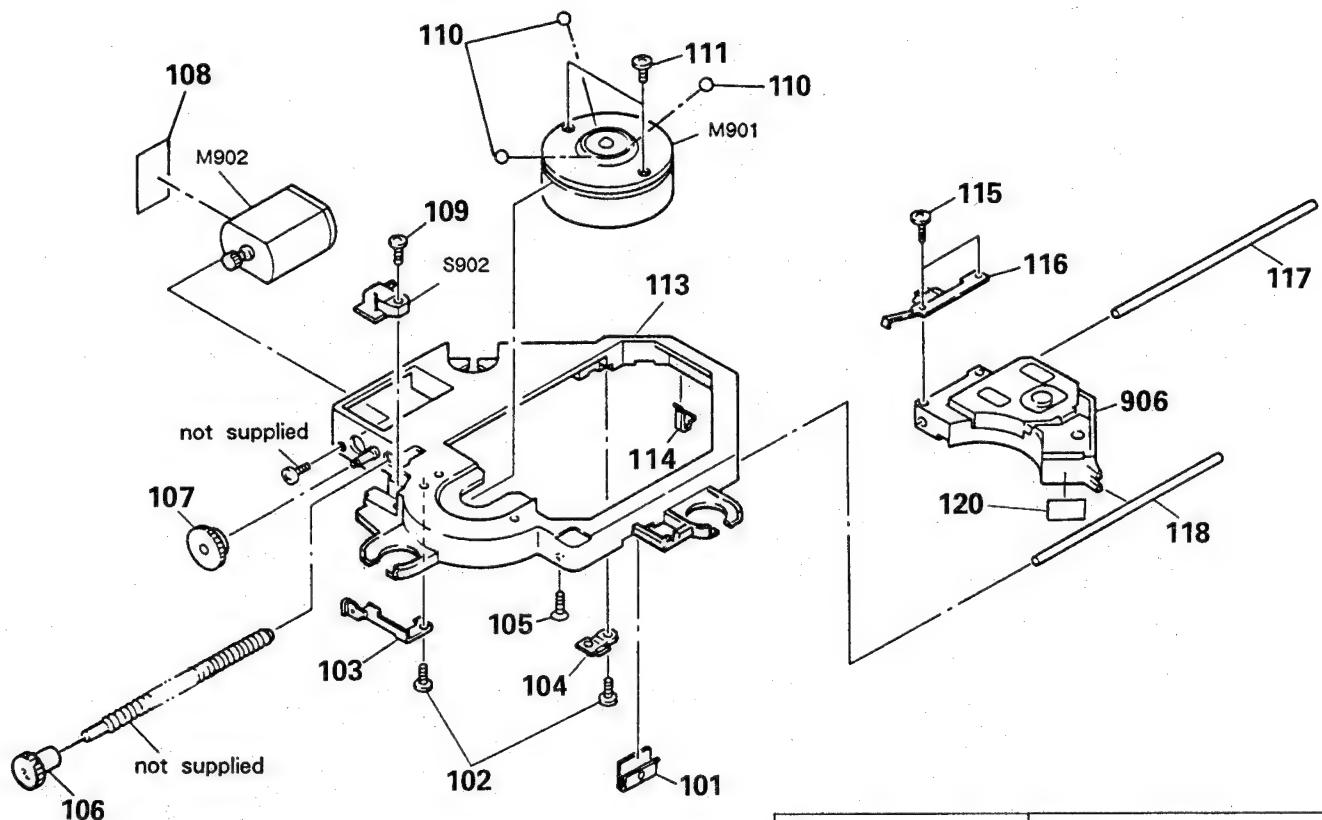
| No. | Part No.      | Description                    | Remarks | No. | Part No.      | Description                | Remarks |
|-----|---------------|--------------------------------|---------|-----|---------------|----------------------------|---------|
| 1   | 4-941-315-01  | SCREW, TAPPING 1.7             |         | 16  | X-4941-051-1  | PANEL ASSY, BOTTOM         |         |
| 2   | 4-941-338-01  | COVER, TUNER                   |         | 17  | 4-941-320-01  | LUG (+), LITHIUM           |         |
| 3   | 3-893-942-01  | SCREW (1.7X4), TAPPING (B)     |         | 18  | *4-941-331-01 | PLATE (MICOM), SHIELD      |         |
| 4   | 4-931-890-01  | SCREW (M1.7X0.35)              |         | 19  | X-4930-117-1  | CASE ASSY, BATTERY         |         |
| 5   | 4-931-825-01  | SHAFT (FULCRUM)                |         | 20  | *4-941-329-01 | CASE (CD UPPER), SHIELD    |         |
| 6   | X-4941-054-1  | LID SUB ASSY, UPPER            |         | 21  | *4-941-330-01 | SHEET (CD), SHIELD         |         |
| 7   | 4-941-324-01  | KNOB (ISS)                     |         | 22  | 4-941-334-01  | LUG (LITHIUM -), BATTERY   |         |
| 8   | 4-941-327-01  | SLIDER (ISS)                   |         | 23  | *4-942-262-01 | SHEET (LINE), INSULATING   |         |
| 9   | 7-621-283-10  | SCREW (B2X10) (G), TAPPING     |         | 24  | *4-942-260-01 | SHEET (PHONE), INSULATING  |         |
| 10  | 9-911-815-01  | CUSHION (A)                    |         | 27  | *4-942-261-01 | SHEET (REMOTE), INSULATING |         |
| 11  | X-4930-136-1  | LID ASSY, BATTERY CASE         |         | 28  | *4-563-500-01 | SHEET (S), ADHESIVE        |         |
| 12  | *4-941-326-01 | PLATE (TU), SHIELD             |         | 901 | A-3015-927-A  | PC BOARD ASSY, RADIO       |         |
| 13  | 4-912-641-01  | FOOT, RUBBER                   |         | 902 | 1-636-310-11  | PC BOARD, RADIO FLEXIBLE   |         |
| 14  | 3-703-816-42  | SCREW (M1.4X2.5), SPECIAL HEAD |         | 903 | A-3015-925-A  | PC BOARD ASSY, MAIN        |         |
| 15  | X-4941-050-1  | LID (LITHIUM) ASSY, BATTERY    |         |     |               |                            |         |

## 5-2. CHASSIS SECTION



| No. | Part No.      | Description                    | Remarks | No. | Part No.      | Description                | Remarks |
|-----|---------------|--------------------------------|---------|-----|---------------|----------------------------|---------|
| 51  | 3-342-073-01  | SCREW (1.7X4), TAPPING         |         | 74  | 3-893-942-01  | SCREW (1.7X4), TAPPING (B) |         |
| 52  | 3-335-797-21  | SCREW (M1.4X3), TOOTHED LOCK   |         | 75  | 4-931-854-01  | COVER, MD                  |         |
| 53  | 4-931-848-01  | KNOB (VOLUME)                  |         | 76  | 4-931-893-01  | SPRING (B)(WHT)            |         |
| 55  | 4-931-847-01  | BUTTON (FRS)                   |         | 77  | 4-931-834-01  | RETAINER, SPRING           |         |
| 56  | *4-926-115-01 | CUSHION (P)                    |         | 78  | 3-323-234-11  | DAMPER (2), HYPER          |         |
| 57  | 3-703-816-42  | SCREW (M1.4X2.5), SPECIAL HEAD |         | 79  | 3-318-203-71  | SCREW (B1.7X5), TAPPING    |         |
| 58  | 4-931-841-01  | KNOB (HOLD)                    |         | 80  | 4-931-866-01  | SHAFT (A), DAMPER          |         |
| 59  | 3-703-816-22  | SCREW (M1.4X5.0), SPECIAL HEAD |         | 81  | 3-831-441-11  | CUSHION (B)                |         |
| 60  | 4-931-851-01  | PLATE (LOCK), FIXED            |         | 82  | 4-924-718-01  | SCREW, INSULATOR           |         |
| 61  | 4-931-850-01  | CLAW, LOCK                     |         | 83  | 4-931-835-01  | SPRING (BLK)               |         |
| 62  | 4-931-858-11  | CABINET                        |         | 84  | 4-941-190-01  | SPACER (PAL)               |         |
| 63  | X-4941-052-1  | WINDOW (LCD) ASSY              |         | 85  | 4-931-868-01  | SHAFT (C), DAMPER          |         |
| 64  | 4-931-833-01  | SPRING (OPEN)                  |         | 86  | 4-931-867-01  | SHAFT (B), DAMPER          |         |
| 65  | 4-931-845-01  | BUTTON (OPEN)                  |         | 87  | 4-917-784-01  | SPACER (S)                 |         |
| 66  | 4-931-844-01  | BUTTON (MODE)                  |         | 88  | 4-927-949-01  | WASHER                     |         |
| 67  | 4-908-711-01  | LABEL, CAUTION, LENS           |         | 89  | *4-941-328-01 | COVER, SHIELD              |         |
| 68  | *4-931-884-01 | PAPER (VOL), SHIELD            |         | 904 | *1-636-311-11 | PC BOARD, CONTROL          |         |
| 69  | X-4941-053-1  | PLATE ASSY, SWITCHING          |         | 905 | *1-636-313-11 | PC BOARD, OPEN SW          |         |
| 70  | 3-831-441-XX  | SPACER, KNOB                   |         |     |               |                            |         |
| 71  | 4-931-839-01  | ARM, DETECTION                 |         |     |               |                            |         |
| 72  | 4-931-824-01  | PLATE (DETECTION), FIXED       |         |     |               |                            |         |
| 73  | 4-931-840-01  | KNOB (DBB)                     |         |     |               |                            |         |

## 5-3. MECHANISM SECTION (CDM-66)



**Note:**  
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

| No. | Part No.     | Description               | Remarks | No.  | Part No.     | Description                      | Remarks |
|-----|--------------|---------------------------|---------|------|--------------|----------------------------------|---------|
| 101 | 4-932-779-11 | RETAINER (A), FLEXIBLE    |         | 111  | 7-627-450-48 | SCREW, PRECISION +K1.7X2.5 TYPE1 |         |
| 102 | 3-895-823-41 | SCREW (B1.4X4), TAPPING   |         | 113  | 4-931-864-01 | CHASSIS, MD                      |         |
| 103 | 4-931-863-01 | SPRING, LEAF              |         | 114  | 4-932-777-01 | RETAINER (B), FLEXIBLE           |         |
| 104 | 4-932-776-01 | RETAINER, SHAFT           |         | 115  | 3-303-809-01 | SCREW (M1.7X2.0), SPECIAL HEAD   |         |
| 105 | 4-941-983-01 | SCWER (B1.7X6), SPECIAL   |         | 116  | 4-932-785-11 | RACK (OUTSERT)                   |         |
| 106 | 4-932-774-01 | GEAR (C)                  |         | 117  | 4-932-784-01 | SHAFT (A)                        |         |
| 107 | 4-931-861-01 | GEAR (B)                  |         | 118  | 4-931-862-01 | SHAFT (B)                        |         |
| 108 | 3-831-441-11 | CUSHION (B)               |         | 119  | 4-941-987-01 | WASHER, POLYETHYLENE             |         |
| 109 | 4-908-792-91 | SCREW (B2X7), TAPPING, PI |         | 120  | 4-941-190-01 | SPACER (PAL)                     |         |
| 110 | 7-671-155-01 | STEEL BALL 3.0            |         | 906  | A-4930-137-1 | PICKUP, OPTICAL (SF-89SON2)      |         |
|     |              |                           |         | M902 | X-4921-256-1 | MOTOR, SLED                      |         |
|     |              |                           |         | S902 | 1-572-025-11 | MICRO SW                         |         |
|     |              |                           |         | M901 | A-3133-413-A | MOTOR ASSY, CLV                  |         |

## SECTION 6

### ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

**CAPACITORS:**MF:  $\mu$ F, PF:  $\mu\mu$ F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

**COILS**

- MMH: mH, UH:  $\mu$ H

**SEMICONDUCTORS**

In each case, U:  $\mu$ , for example:  
 UA...:  $\mu$ A..., UPA...:  $\mu$ PA...  
 UPC...:  $\mu$ PC, UPD...:  $\mu$ PD...

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

| Ref.No. | Part No.   | Description                   |        |      | Ref.No. | Part No.     | Description           |     |      |
|---------|--|-------------------------------|--------|------|---------|--------------|-----------------------|-----|------|
| 901     | A-3015-927-A   | PC BOARD ASSY, RADIO          |        |      | C031    | 1-163-986-00 | CERAMIC CHIP 0.027MF  | 10% | 25V  |
| 902     | 1-636-310-11   | PC BOARD, RADIO FLEXIBLE      |        |      | C032    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| 903     | A-3015-925-A   | PC BOARD ASSY, MAIN           |        |      | C033    | 1-135-158-21 | TANTAL. CHIP 15MF     | 20% | 4V   |
| 904     | *1-636-311-11  | PC BOARD, CONTROL             |        |      | C034    | 1-135-180-21 | TANTAL. CHIP 3.3MF    | 20% | 4V   |
| 905     | *1-636-313-11  | PC BOARD, OPEN SW             |        |      | C035    | 1-162-995-11 | CERAMIC CHIP 0.022MF  |     | 50V  |
| 906     |  X-4930-137-1 | PICKUP, OPTICAL (SF-89SON2)   |        |      | C036    | 1-135-158-21 | TANTAL. CHIP 15MF     | 20% | 4V   |
| C41     | 1-135-091-00   | TANTAL. CHIP 1MF              | 10%    | 16V  | C037    | 1-164-234-11 | CERAMIC CHIP 1MF      |     | 10V  |
| C43     | 1-135-091-00   | TANTAL. CHIP 1MF              | 10%    | 16V  | C038    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C44     | 1-162-942-11   | CERAMIC CHIP 12PF             | 5%     | 50V  | C039    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C45     | 1-162-941-11   | CERAMIC CHIP 10PF             | 0.5PF  | 50V  | C040    | 1-162-974-11 | CERAMIC CHIP 0.01MF   |     | 50V  |
| C48     | 1-164-005-11   | CERAMIC CHIP 0.47MF           |        | 25V  | C042    | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10% | 25V  |
| C53     | 1-164-005-11   | CERAMIC CHIP 0.47MF           |        | 25V  | C046    | 1-162-944-11 | CERAMIC CHIP 18PF     | 5%  | 50V  |
| C63     | 1-135-207-11   | TANTAL. CHIP 68MF             | 20%    | 6.3V | C047    | 1-162-962-11 | CERAMIC CHIP 470PF    | 10% | 50V  |
| C001    | 1-162-995-11   | CERAMIC CHIP 0.022MF          |        | 50V  | C049    | 1-164-222-11 | CERAMIC CHIP 0.22MF   |     | 25V  |
| C002    | 1-162-966-11   | CERAMIC CHIP 0.0022MF         | 10%    | 50V  | C050    | 1-164-234-11 | CERAMIC CHIP 1MF      |     | 10V  |
| C003    | 1-162-932-11   | CERAMIC CHIP 2PF              | 0.25PF | 50V  | C051    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 1%  | 50V  |
| C004    | 1-162-962-11   | (AEP)...CERAMIC CHIP 470PF    | 10%    | 50V  | C052    | 1-162-995-11 | CERAMIC CHIP 0.022MF  |     | 50V  |
| C004    | 1-162-966-11   | (E).....CERAMIC CHIP 0.0022MF | 10%    | 50V  | C054    | 1-162-970-11 | CERAMIC CHIP 0.01MF   | 10% | 25V  |
| C005    | 1-162-966-11   | CERAMIC CHIP 0.0022MF         | 10%    | 50V  | C055    | 1-163-019-00 | CERAMIC CHIP 0.0068MF | 10% | 50V  |
| C006    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C056    | 1-162-970-11 | CERAMIC CHIP 0.01MF   | 10% | 25V  |
| C007    | 1-162-932-11   | (E)...CERAMIC CHIP 2PF        |        | 50V  | C057    | 1-164-234-11 | CERAMIC CHIP 1MF      |     | 10V  |
| C008    | 1-162-999-11   | (AEP)...CERAMIC CHIP 91PF     | 5%     | 50V  | C058    | 1-164-346-11 | CERAMIC CHIP 1MF      |     | 16V  |
| C008    | 1-162-966-11   | (E).....CERAMIC CHIP 0.0022MF | 10%    | 50V  | C059    | 1-135-158-21 | TANTAL. CHIP 15MF     | 20% | 4V   |
| C009    | 1-162-934-11   | CERAMIC CHIP 3PF              | 0.25PF | 50V  | C060    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10% | 50V  |
| C010    | 1-162-970-11   | CERAMIC CHIP 0.01MF           | 10%    | 25V  | C061    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10% | 50V  |
| C011    | 1-135-158-21   | TANTAL. CHIP 15MF             | 20%    | 4V   | C062    | 1-163-011-11 | CERAMIC CHIP 0.0015MF | 10% | 50V  |
| C012    | 1-162-995-11   | CERAMIC CHIP 0.022MF          |        | 50V  | C063    | 1-135-144-11 | ELECT CHIP 22MF       | 20% | 6.3V |
| C013    | 1-135-158-21   | TANTAL. CHIP 15MF             | 20%    | 4V   | C064    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |     | 25V  |
| C014    | 1-164-227-11   | CERAMIC CHIP 0.022MF          | 10%    | 25V  | C065    | 1-164-234-11 | CERAMIC CHIP 1MF      |     | 10V  |
| C015    | 1-163-037-11   | CERAMIC CHIP 0.022MF          | 10%    | 25V  | C066    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C016    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C067    | 1-162-638-11 | CERAMIC CHIP 1MF      |     | 16V  |
| C017    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C068    | 1-164-182-11 | CERAMIC CHIP 0.0033MF | 10% | 50V  |
| C018    | 1-164-156-11   | CERAMIC CHIP 0.1MF            |        | 25V  | C069    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C019    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C070    | 1-162-964-11 | CERAMIC CHIP 0.001MF  | 10% | 50V  |
| C020    | 1-163-197-00   | CERAMIC CHIP 470PF            | 5%     | 50V  | C071    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20% | 6.3V |
| C021    | 1-163-095-00   | CERAMIC CHIP 12PF             | 5%     | 50V  | C072    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C022    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C073    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C023    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C074    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |     | 25V  |
| C024    | 1-162-970-11   | CERAMIC CHIP 0.01MF           | 10%    | 25V  | C075    | 1-164-234-11 | CERAMIC CHIP 1MF      |     | 10V  |
| C025    | 1-164-156-11   | CERAMIC CHIP 0.1MF            |        | 25V  | C076    | 1-164-182-11 | CERAMIC CHIP 0.0033MF | 10% | 50V  |
| C026    | 1-163-133-00   | CERAMIC CHIP 470PF            | 5%     | 50V  | C077    | 1-163-117-00 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C027    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C078    | 1-135-158-21 | TANTAL. CHIP 15MF     | 20% | 4V   |
| C028    | 1-162-974-11   | CERAMIC CHIP 0.01MF           |        | 50V  | C079    | 1-163-011-11 | CERAMIC CHIP 0.0015MF | 10% | 50V  |
| C029    | 1-135-151-21   | TANTAL. CHIP 4.7MF            | 20%    | 4V   | C080    | 1-163-117-00 | CERAMIC CHIP 100PF    | 5%  | 50V  |
| C030    | 1-164-234-11   | CERAMIC CHIP 1MF              |        | 10V  | C081    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10% | 50V  |
|         |  |                               |        |      | C082    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10% | 50V  |

| Ref.No. | Part No.     | Description           | Ref.No. | Part No.                            | Description                            |            |
|---------|--------------|-----------------------|---------|-------------------------------------|--|------------|
| C083    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%      | 50V                                 | C328 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C084    | 1-164-234-11 | CERAMIC CHIP 1MF      | 10%     | 10V                                 | C329 1-162-953-11 CERAMIC CHIP 100PF   | 5% 50V     |
| C085    | 1-164-156-11 | CERAMIC CHIP 0.1MF    | 25V     | C401 1-124-472-11 ELECT 470MF       | 20% 10V                                |            |
| C086    | 1-135-174-11 | TANTAL. CHIP 10MF     | 20%     | 10V                                 | C402 1-126-245-11 ELECT 330MF          | 20% 6.3V   |
| C088    | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%     | 25V                                 | C403 1-126-245-11 ELECT 330MF          | 20% 6.3V   |
| C089    | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%     | 25V                                 | C404 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C090    | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%     | 25V                                 | C405 1-163-141-00 CERAMIC CHIP 0.001MF | 5% 50V     |
| C091    | 1-162-951-11 | CERAMIC CHIP 68PF     | 5%      | 50V                                 | C406 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C092    | 1-162-951-11 | CERAMIC CHIP 68PF     | 5%      | 50V                                 | C407 1-126-207-11 ELECT CHIP 33MF      | 20% 4V     |
| C093    | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%     | 25V                                 | C408 1-126-246-11 ELECT CHIP 220MF     | 20% 4V     |
| C094    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C409 1-126-206-11 ELECT CHIP 100MF     | 20% 6.3V   |
| C095    | 1-164-156-11 | CERAMIC CHIP 0.1MF    | 25V     | C410 1-135-162-21 TANTAL. CHIP 33MF | 20% 4V                                 |            |
| C096    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C411 1-163-141-00 CERAMIC CHIP 0.001MF | 5% 50V     |
| C097    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C412 1-126-206-11 ELECT CHIP 100MF     | 20% 6.3V   |
| C098    | 1-164-232-11 | CERAMIC CHIP 0.01MF   | 10%     | 50V                                 | C413 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C099    | 1-135-156-21 | TANTAL. CHIP 6.8MF    | 20%     | 6.3V                                | C414 1-135-144-11 TANTAL. CHIP 22MF    | 20% 6.3V   |
| C100    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C415 1-126-206-11 ELECT CHIP 100MF     | 20% 6.3V   |
| C101    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C416 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C102    | 1-135-151-21 | TANTAL. CHIP 4.7MF    | 20%     | 4V                                  | C417 1-164-227-11 CERAMIC CHIP 0.022MF | 10% 25V    |
| C103    | 1-163-145-00 | CERAMIC CHIP 0.0015MF | 5%      | 50V                                 | C418 1-124-779-00 ELECT CHIP 10MF      | 20% 16V    |
| C104    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C419 1-124-779-00 ELECT CHIP 10MF      | 20% 16V    |
| C106    | 1-126-246-11 | ELECT CHIP 220MF      | 20%     | 4V                                  | C420 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C107    | 1-162-957-11 | CERAMIC CHIP 220PF    | 5%      | 50V                                 | C421 1-162-953-11 CERAMIC CHIP 100PF   | 5% 50V     |
| C109    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10%     | 50V                                 | C424 1-124-778-00 ELECT CHIP 22MF      | 20% 6.3V   |
| C110    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C425 1-135-207-11 TANTAL. CHIP 68MF    | 20% 6.3V   |
| C202    | 1-135-151-21 | TANTAL. CHIP 4.7MF    | 20%     | 4V                                  | C426 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C203    | 1-163-145-00 | CERAMIC CHIP 0.0015MF | 5%      | 50V                                 | C427 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C206    | 1-126-246-11 | ELECT CHIP 220MF      | 20%     | 4V                                  | C428 1-135-144-11 TANTAL. CHIP 22MF    | 20% 6.3V   |
| C207    | 1-162-957-11 | CERAMIC CHIP 220PF    | 5%      | 50V                                 | C429 1-163-989-11 CERAMIC CHIP 0.033MF | 10% 25V    |
| C209    | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10%     | 50V                                 | C430 1-162-974-11 CERAMIC CHIP 0.01MF  | 50V        |
| C210    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C431 1-135-144-11 TANTAL. CHIP 22MF    | 20% 6.3V   |
| C211    | 1-163-809-11 | CERAMIC CHIP 0.047MF  | 10%     | 25V                                 | C432 1-135-144-11 TANTAL. CHIP 22MF    | 20% 6.3V   |
| C301    | 1-162-942-11 | CERAMIC CHIP 12PF     | 5%      | 50V                                 | C433 1-135-180-21 TANTAL. CHIP 3.3MF   | 20% 6.3V   |
| C302    | 1-162-942-11 | CERAMIC CHIP 12PF     | 5%      | 50V                                 | C435 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C303    | 1-162-945-11 | CERAMIC CHIP 22PF     | 5%      | 50V                                 | C436 1-135-207-11 TANTAL. CHIP 68MF    | 20% 6.3V   |
| C304    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |         | 25V                                 | C437 1-135-144-11 TANTAL. CHIP 22MF    | 20% 6.3V   |
| C305    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C438 1-135-207-11 TANTAL. CHIP 68MF    | 20% 6.3V   |
| C306    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C439 1-163-023-00 CERAMIC CHIP 0.015MF | 10% 50V    |
| C307    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C440 1-164-346-11 CERAMIC CHIP 1MF     | 16V        |
| C308    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C441 1-162-974-11 CERAMIC CHIP 0.01MF  | 50V        |
| C309    | 1-126-206-11 | ELECT CHIP 100MF      | 20%     | 6.3V                                | C451 1-135-230-11 TANTAL. CHIP 6.8MF   | 20% 6.3V   |
| C310    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%      | 50V                                 | C501 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C311    | 1-126-207-11 | ELECT CHIP 33MF       | 20%     | 4V                                  | C502 1-163-989-11 CERAMIC CHIP 0.033MF | 10% 25V    |
| C312    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C503 1-164-232-11 CERAMIC CHIP 0.01MF  | 10% 50V    |
| C313    | 1-135-130-11 | TANTAL. CHIP 4.7MF    | 20%     | 6.3V                                | C504 1-135-145-11 TANTAL. CHIP 0.47MF  | 20% 25V    |
| C314    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |         | 25V                                 | C505 1-126-603-11 ELECT CHIP 4.7MF     | 20% 16V    |
| C315    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |         | 25V                                 | C506 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C316    | 1-135-130-11 | TANTAL. CHIP 4.7MF    | 20%     | 6.3V                                | C507 1-135-162-21 TANTAL. CHIP 33MF    | 20% 4V     |
| C317    | 1-164-156-11 | CERAMIC CHIP 0.1MF    |         | 25V                                 | C508 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C318    | 1-164-222-11 | CERAMIC CHIP 0.22MF   |         | 25V                                 | C509 1-135-162-21 TANTAL. CHIP 33MF    | 20% 4V     |
| C319    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C510 1-164-232-11 CERAMIC CHIP 0.01MF  | 10% 50V    |
| C320    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%      | 50V                                 | C511 1-162-942-11 CERAMIC CHIP 12PF    | 5% 50V     |
| C321    | 1-163-117-00 | CERAMIC CHIP 100PF    | 5%      | 50V                                 | C512 1-135-162-21 TANTAL. CHIP 33MF    | 20% 4V     |
| C322    | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%      | 50V                                 | C513 1-164-232-11 CERAMIC CHIP 0.01MF  | 10% 50V    |
| C323    | 1-164-346-11 | CERAMIC CHIP 1MF      |         | 16V                                 | C514 1-135-162-21 TANTAL. CHIP 33MF    | 20% 4V     |
| C324    | 1-135-162-21 | TANTAL. CHIP 33MF     | 20%     | 4V                                  | C515 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C326    | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%     | 6.3V                                | C516 1-164-156-11 CERAMIC CHIP 0.1MF   | 25V        |
| C327    | 1-163-809-11 | CERAMIC CHIP 0.047MF  | 10%     | 25V                                 | C517 1-162-932-11 CERAMIC CHIP 2PF     | 0.25PF 50V |

| Ref. No. | Part No.     | Description           | Ref. No. | Part No. | Description |              |                                 |     |      |
|----------|--------------|-----------------------|----------|----------|-------------|--------------|---------------------------------|-----|------|
| C518     | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%      | 25V      | C811        | 1-135-130-11 | TANTAL. CHIP 4.7MF              | 20% | 6.3V |
| C519     | 1-162-957-11 | CERAMIC CHIP 220PF    | 5%       | 50V      | C814        | 1-164-346-11 | CERAMIC CHIP 1MF                | 16V |      |
| C520     | 1-135-130-11 | TANTAL. CHIP 4.7MF    | 20%      | 6.3V     | C815        | 1-164-156-11 | CERAMIC CHIP 0.1MF              | 25V |      |
| C521     | 1-164-227-11 | CERAMIC CHIP 0.022MF  | 10%      | 25V      | C817        | 1-162-944-11 | CERAMIC CHIP 18PF               | 5%  | 50V  |
| C522     | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%      | 6.3V     | C818        | 1-164-346-11 | CERAMIC CHIP 1MF                | 16V |      |
| C523     | 1-162-949-11 | CERAMIC CHIP 47PF     | 5%       | 50V      | C819        | 1-164-346-11 | CERAMIC CHIP 1MF                | 16V |      |
| C524     | 1-135-144-11 | TANTAL. CHIP 22MF     | 20%      | 6.3V     | C820        | 1-162-995-11 | CERAMIC CHIP 0.022MF            | 50V |      |
| C525     | 1-135-130-11 | TANTAL. CHIP 4.7MF    | 20%      | 6.3V     | C821        | 1-162-974-11 | CERAMIC CHIP 0.01MF             | 50V |      |
| C526     | 1-164-156-11 | CERAMIC CHIP 0.1MF    | 25V      |          | C822        | 1-162-974-11 | CERAMIC CHIP 0.01MF             | 50V |      |
| C527     | 1-162-964-11 | CERAMIC CHIP 0.001MF  | 10%      | 50V      | C823        | 1-162-974-11 | CERAMIC CHIP 0.01MF             | 50V |      |
| C528     | 1-163-809-11 | CERAMIC CHIP 0.047MF  | 10%      | 25V      | C824        | 1-162-974-11 | CERAMIC CHIP 0.01MF             | 50V |      |
| C529     | 1-164-346-11 | CERAMIC CHIP 1MF      | 16V      |          | C825        | 1-164-346-11 | CERAMIC CHIP 1MF                | 16V |      |
| C530     | 1-163-023-00 | CERAMIC CHIP 0.015MF  | 10%      | 50V      | C826        | 1-135-130-11 | TANTAL. CHIP 4.7MF              | 20% | 6.3V |
| C531     | 1-126-206-11 | ELECT CHIP 100MF      | 20%      | 6.3V     | C827        | 1-135-207-11 | TANTAL. CHIP 68MF               | 20% | 6.3V |
| C532     | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%       | 50V      | CF1         | 1-567-910-11 | FILTER, CERAMIC                 |     |      |
| C533     | 1-163-989-11 | CERAMIC CHIP 0.033MF  | 10%      | 25V      | CF2         | 1-567-910-11 | FILTER, CERAMIC                 |     |      |
| C534     | 1-164-005-11 | CERAMIC CHIP 0.47MF   |          | 25V      | CF003       | 1-577-065-11 | FILTER, CERAMIC                 |     |      |
| C536     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | CN501       | 1-566-527-11 | CONNECTOR, FPC (ZIF) 11P        |     |      |
| C537     | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10%      | 50V      | CN502       | 1-566-521-11 | CONNECTOR, FPC (ZIF) 5P         |     |      |
| C538     | 1-164-005-11 | CERAMIC CHIP 0.47MF   |          | 25V      | CN701       | 1-566-528-21 | CONNECTOR, FPC (ZIF) 12P        |     |      |
| C540     | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%       | 50V      | CN801       | 1-580-313-11 | SOCKET, CONNECTOR 16P           |     |      |
| C541     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | CN802       | 1-580-312-11 | SOCKET, CONNECTOR (PLUG) 16P    |     |      |
| C542     | 1-163-809-11 | CERAMIC CHIP 0.047MF  | 10%      | 25V      | CN803       | 1-566-533-11 | CONNECTOR, FPC (ZIF) 17P        |     |      |
| C543     | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%       | 50V      | CN804       | 1-568-207-11 | CONNECTOR, FPC (ZIF) 23P        |     |      |
| C544     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | CNJ302      | 1-568-758-11 | JACK (PHONES/REMOTE)            |     |      |
| C546     | 1-135-148-21 | TANTAL. CHIP 1.5MF    | 20%      | 10V      | CNJ401      | 1-568-907-21 | JACK, EXTERNAL POWER (DC IN 6V) |     |      |
| C547     | 1-135-157-21 | TANTAL. CHIP 10MF     | 20%      | 6.3V     | CT003       | 1-141-327-11 | CAP, VAR, TRIMMER (CHIP TYPE)   |     |      |
| C548     | 1-164-222-11 | CERAMIC CHIP 0.22MF   |          | 25V      | CT004       | 1-141-327-11 | CAP, VAR, TRIMMER (CHIP TYPE)   |     |      |
| C549     | 1-163-986-00 | CERAMIC CHIP 0.027MF  | 10%      | 25V      | CT005       | 1-141-325-11 | CAP, VAR, TRIMMER (CHIP TYPE)   |     |      |
| C550     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D001        | 8-719-939-02 | DIODE SVC203CP                  |     |      |
| C551     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | D002        | 8-719-939-02 | DIODE SVC203CP                  |     |      |
| C552     | 1-164-222-11 | CERAMIC CHIP 0.22MF   |          | 25V      | D003        | 8-719-951-05 | DIODE KV1560                    |     |      |
| C553     | 1-164-005-11 | CERAMIC CHIP 0.47MF   |          | 25V      | D004        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C554     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D005        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C555     | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%       | 50V      | D006        | 8-719-106-53 | DIODE RD10M-B2                  |     |      |
| C556     | 1-135-157-21 | TANTAL. CHIP 10MF     | 20%      | 6.3V     | D007        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C557     | 1-135-157-21 | TANTAL. CHIP 10MF     | 20%      | 6.3V     | D011        | 8-719-421-36 | DIODE MA8036-L                  |     |      |
| C558     | 1-135-148-21 | TANTAL. CHIP 1.5MF    | 20%      | 10V      | D012        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C559     | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10%      | 50V      | D013        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C560     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | D014        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C561     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | D015        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C562     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D017        | 8-719-421-36 | DIODE MA8036-L                  |     |      |
| C601     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D202        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C604     | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%       | 50V      | D203        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C605     | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%       | 50V      | D204        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C607     | 1-162-953-11 | CERAMIC CHIP 100PF    | 5%       | 50V      | D205        | 8-719-421-21 | DIODE MA8120-L                  |     |      |
| C715     | 1-162-966-11 | CERAMIC CHIP 0.0022MF | 10%      | 50V      | D302        | 8-719-104-34 | DIODE 1S2836                    |     |      |
| C716     | 1-162-909-11 | CERAMIC CHIP 4PF      | 0.25PF   | 50V      | D303        | 8-719-404-46 | DIODE MA110                     |     |      |
| C801     | 1-162-951-11 | CERAMIC CHIP 68PF     | 5%       | 50V      | D401        | 8-719-975-33 | DIODE RB110C                    |     |      |
| C802     | 1-162-951-11 | CERAMIC CHIP 68PF     | 5%       | 50V      | D402        | 8-719-975-40 | DIODE RB411D                    |     |      |
| C803     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D403        | 8-719-975-43 | DIODE RB420D                    |     |      |
| C804     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D404        | 8-719-975-40 | DIODE RB411D                    |     |      |
| C805     | 1-164-346-11 | CERAMIC CHIP 1MF      |          | 16V      | D405        | 8-719-421-15 | DIODE MA8027-L                  |     |      |
| C806     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      | D407        | 8-719-400-18 | DIODE MA152WK                   |     |      |
| C807     | 1-162-944-11 | CERAMIC CHIP 18PF     | 5%       | 50V      | D408        | 8-719-975-33 | DIODE RB110C                    |     |      |
| C808     | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5%       | 50V      | D409        | 8-719-302-88 | DIODE SEL2913K-D                |     |      |
| C809     | 1-164-005-11 | CERAMIC CHIP 0.47MF   |          | 25V      |             |              |                                 |     |      |
| C810     | 1-164-156-11 | CERAMIC CHIP 0.1MF    |          | 25V      |             |              |                                 |     |      |

| Ref.No. | Part No.     | Description             | Ref.No. | Part No.     | Description               |
|---------|--------------|-------------------------|---------|--------------|---------------------------|
| Q013    | 8-729-903-10 | TRANSISTOR FMW1         | Q502    | 8-729-904-87 | TRANSISTOR 2SB1197K-R     |
| Q014    | 8-729-901-05 | TRANSISTOR DTA124EK     | Q503    | 8-729-920-74 | TRANSISTOR 2SC2412K-QR    |
| Q015    | 8-729-807-87 | TRANSISTOR 2SB1295-UL6  | Q504    | 8-729-920-74 | TRANSISTOR 2SC2412K-QR    |
| Q016    | 8-729-901-00 | TRANSISTOR DTC124EK     | Q505    | 8-729-901-00 | TRANSISTOR DTC124EK       |
| Q017    | 8-729-271-23 | TRANSISTOR 2SC2712      | Q506    | 8-729-924-79 | TRANSISTOR FMG8           |
| Q018    | 8-729-159-64 | TRANSISTOR 2SD596       | Q510    | 8-729-420-20 | TRANSISTOR XN4312         |
| Q019    | 8-729-141-48 | TRANSISTOR 2SB624-BV345 | Q801    | 8-729-902-96 | TRANSISTOR FMS1           |
| Q020    | 8-729-140-75 | TRANSISTOR 2SD999-CLK   | Q802    | 8-729-902-96 | TRANSISTOR FMS1           |
| Q101    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q803    | 8-729-402-16 | TRANSISTOR XN4608         |
| Q102    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q804    | 8-729-420-20 | TRANSISTOR XN4312         |
| Q103    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q805    | 8-729-901-05 | TRANSISTOR DTA124EK       |
| Q201    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q806    | 8-729-901-00 | TRANSISTOR DTC124EK       |
| Q202    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q807    | 8-729-921-72 | TRANSISTOR 2SD1781K-R     |
| Q203    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | Q808    | 8-729-901-05 | TRANSISTOR DTA124EK       |
| Q301    | 8-729-420-27 | TRANSISTOR 2SD1819A-QRS | Q809    | 8-729-420-20 | TRANSISTOR XN4312         |
| Q302    | 8-729-806-75 | TRANSISTOR 2SB1123      | Q811    | 8-729-901-00 | TRANSISTOR DTC124EK       |
| Q304    | 8-729-903-10 | TRANSISTOR FMW1         | Q813    | 8-729-900-51 | TRANSISTOR DTA114TK       |
| Q401    | 8-729-923-36 | TRANSISTOR 2SD1963-Q.R  | Q814    | 8-729-921-72 | TRANSISTOR 2SD1781K-R     |
| Q402    | 8-729-926-71 | TRANSISTOR 2SB1308-R    | Q815    | 8-729-901-05 | TRANSISTOR DTA124EK       |
| Q403    | 8-729-901-00 | TRANSISTOR DTC124EK     | Q816    | 8-729-901-05 | TRANSISTOR DTA124EK       |
| Q404    | 8-729-904-87 | TRANSISTOR 2SB1197K-R   | Q817    | 8-729-901-05 | TRANSISTOR DTA124EK       |
| Q405    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | R001    | 1-216-842-11 | METAL GLAZE 56K 5% 1/16W  |
| Q406    | 8-729-901-00 | TRANSISTOR DTC124EK     | R002    | 1-216-818-11 | METAL GLAZE 560 5% 1/16W  |
| Q407    | 8-729-926-71 | TRANSISTOR 2SB1308-R    | R003    | 1-216-853-11 | METAL GLAZE 470K 5% 1/16W |
| Q408    | 8-729-421-23 | TRANSISTOR XN1216       | R004    | 1-216-853-11 | METAL GLAZE 470K 5% 1/16W |
| Q409    | 8-729-901-00 | TRANSISTOR DTC124EK     | R005    | 1-216-834-11 | METAL GLAZE 12K 5% 1/16W  |
| Q410    | 8-729-901-05 | TRANSISTOR DTA124EK     | R006    | 1-216-262-00 | METAL GLAZE 470K 5% 1/8W  |
| Q411    | 8-729-116-06 | TRANSISTOR 2SK160-K6    | R007    | 1-216-853-11 | METAL GLAZE 470K 5% 1/16W |
| Q412    | 8-729-921-84 | TRANSISTOR 2SB1182F5-Q  | R008    | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W  |
| Q413    | 8-729-901-00 | TRANSISTOR DTC124EK     | R009    | 1-216-818-11 | METAL GLAZE 560 5% 1/16W  |
| Q414    | 8-729-207-55 | TRANSISTOR RN1401       | R010    | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W   |
| Q415    | 8-729-904-87 | TRANSISTOR 2SB1197K-R   | R011    | 1-216-813-11 | METAL GLAZE 220 5% 1/16W  |
| Q416    | 8-729-920-71 | TRANSISTOR 2SA1037K-QR  | R012    | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W   |
| Q417    | 8-729-420-20 | TRANSISTOR XN4312       | R013    | 1-216-067-00 | METAL GLAZE 5.6K 5% 1/10W |
| Q418    | 8-729-403-42 | TRANSISTOR XN1216       | R014    | 1-216-019-00 | METAL GLAZE 56 5% 1/10W   |
| Q419    | 8-729-920-71 | TRANSISTOR 2SA1037K-QR  | R015    | 1-216-850-11 | METAL GLAZE 270K 5% 1/16W |
| Q420    | 8-729-421-23 | TRANSISTOR XN1216       | R016    | 1-216-809-11 | METAL GLAZE 100 5% 1/16W  |
| Q421    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | R017    | 1-216-043-00 | METAL GLAZE 560 5% 1/10W  |
| Q422    | 8-729-901-00 | TRANSISTOR DTC124EK     | R018    | 1-216-037-00 | METAL GLAZE 330 5% 1/10W  |
| Q423    | 8-729-920-71 | TRANSISTOR 2SA1037K-QR  | R019    | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W |
| Q425    | 8-729-923-36 | TRANSISTOR 2SD1963-Q.R  | R020    | 1-216-025-00 | METAL GLAZE 100 5% 1/10W  |
| Q429    | 8-729-901-00 | TRANSISTOR DTC124EK     | R021    | 1-216-844-11 | METAL GLAZE 82K 5% 1/16W  |
| Q430    | 8-729-904-87 | TRANSISTOR 2SB1197K-R   | R022    | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W  |
| Q431    | 8-729-807-33 | TRANSISTOR 2SB1123      | R023    | 1-216-814-11 | METAL GLAZE 270 5% 1/16W  |
| Q432    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | R024    | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W |
| Q433    | 8-729-117-32 | TRANSISTOR 2SC4177      | R025    | 1-216-841-11 | METAL GLAZE 47K 5% 1/16W  |
| Q434    | 8-729-400-56 | TRANSISTOR 2SD1328-T    | R026    | 1-216-809-11 | METAL GLAZE 100 5% 1/16W  |
| Q435    | 8-729-904-87 | TRANSISTOR 2SB1197K-R   | R027    | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W  |
| Q436    | 8-729-420-24 | TRANSISTOR 2SB1218A-S   | R028    | 1-216-839-11 | METAL GLAZE 33K 5% 1/16W  |
| Q437    | 8-729-901-03 | TRANSISTOR DTC144EK     | R029    | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W   |
| Q438    | 8-729-901-00 | TRANSISTOR DTC124EK     | R030    | 1-216-829-11 | METAL GLAZE 4.7K 5% 1/16W |
| Q439    | 8-729-926-71 | TRANSISTOR 2SB1308-R    | R031    | 1-216-829-11 | METAL GLAZE 4.7K 5% 1/16W |
| Q440    | 8-729-901-00 | TRANSISTOR DTC124EK     | R032    | 1-216-829-11 | METAL GLAZE 4.7K 5% 1/16W |
| Q441    | 8-729-921-72 | TRANSISTOR 2SD1781K-R   | R033    | 1-216-826-11 | METAL GLAZE 2.7K 5% 1/16W |
| Q442    | 8-729-162-44 | TRANSISTOR 2SB624-BV4   | R034    | 1-216-834-11 | METAL GLAZE 12K 5% 1/16W  |
| Q443    | 8-729-900-98 | TRANSISTOR DTC143TK     | R035    | 1-216-812-11 | METAL GLAZE 180 5% 1/16W  |
| Q501    | 8-729-402-90 | TRANSISTOR XN4609       | R036    | 1-216-820-11 | METAL GLAZE 820 5% 1/16W  |

| Ref. No. | Part No.     | Description                | Ref. No. | Part No.     | Description                 |
|----------|--------------|----------------------------|----------|--------------|-----------------------------|
| R037     | 1-216-822-11 | METAL GLAZE 1.2K 5% 1/16W  | R204     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R038     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R205     | 1-216-649-11 | METAL CHIP 820 0.50% 1/10W  |
| R039     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W  | R206     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W   |
| R040     | 1-216-331-11 | METAL GLAZE 9.1K 1% 1/10W  | R207     | 1-216-813-11 | METAL GLAZE 220 5% 1/16W    |
| R041     | 1-216-839-11 | METAL GLAZE 33K 5% 1/16W   | R208     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W   |
| R042     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R209     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R043     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W   | R210     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R044     | 1-216-809-11 | METAL GLAZE 100 5% 1/16W   | R211     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W   |
| R045     | 1-216-826-11 | METAL GLAZE 2.7K 5% 1/16W  | R216     | 1-216-831-11 | METAL GLAZE 6.8K 5% 1/16W   |
| R046     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R217     | 1-216-797-11 | METAL GLAZE 10 5% 1/16W     |
| R047     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W  | R301     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W   |
| R048     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W  | R302     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W     |
| R049     | 1-216-849-11 | METAL GLAZE 220K 5% 1/16W  | R303     | 1-216-829-11 | METAL GLAZE 4.7K 5% 1/16W   |
| R050     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W  | R304     | 1-216-822-11 | METAL GLAZE 1.2K 5% 1/16W   |
| R051     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W  | R305     | 1-216-857-11 | METAL GLAZE 1M 5% 1/16W     |
| R052     | 1-216-793-11 | METAL GLAZE 4.7 5% 1/16W   | R306     | 1-216-835-11 | METAL GLAZE 15K 5% 1/16W    |
| R053     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R307     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W   |
| R054     | 1-216-815-11 | METAL GLAZE 330 5% 1/16W   | R308     | 1-216-847-11 | METAL GLAZE 150K 5% 1/16W   |
| R055     | 1-216-820-11 | METAL GLAZE 820 5% 1/16W   | R309     | 1-216-674-11 | METAL CHIP 9.1K 0.50% 1/10W |
| R056     | 1-216-820-11 | METAL GLAZE 820 5% 1/16W   | R310     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W   |
| R057     | 1-216-793-11 | METAL GLAZE 4.7 5% 1/16W   | R312     | 1-216-797-11 | METAL GLAZE 10 5% 1/16W     |
| R058     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W   | R313     | 1-216-857-11 | METAL GLAZE 1M 5% 1/16W     |
| R059     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R401     | 1-216-824-11 | METAL GLAZE 1.8K 5% 1/16W   |
| R061     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W  | R402     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W    |
| R062     | 1-216-230-00 | METAL GLAZE 22K 5% 1/8W    | R403     | 1-216-815-11 | METAL GLAZE 330 5% 1/16W    |
| R063     | 1-216-826-11 | METAL GLAZE 2.7K 5% 1/16W  | R404     | 1-216-824-11 | METAL GLAZE 1.8K 5% 1/16W   |
| R064     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R405     | 1-216-835-11 | METAL GLAZE 15K 5% 1/16W    |
| R066     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R406     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W   |
| R067     | 1-216-831-11 | METAL GLAZE 6.8K 5% 1/16W  | R407     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R068     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W   | R408     | 1-216-817-11 | METAL GLAZE 470 5% 1/16W    |
| R069     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W  | R409     | 1-216-815-11 | METAL GLAZE 330 5% 1/16W    |
| R070     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R410     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W    |
| R071     | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W    | R411     | 1-216-817-11 | METAL GLAZE 470 5% 1/16W    |
| R072     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W   | R412     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R087     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W   | R413     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W   |
| R088     | 1-216-831-11 | METAL GLAZE 6.8K 5% 1/16W  | R414     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W   |
| R089     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W  | R415     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W     |
| R090     | 1-216-831-11 | METAL GLAZE 6.8K 5% 1/16W  | R416     | 1-216-817-11 | METAL GLAZE 470 5% 1/16W    |
| R091     | 1-216-827-11 | METAL GLAZE 3.3K 5% 1/16W  | R417     | 1-216-662-11 | METAL CHIP 3K 0.50% 1/10W   |
| R092     | 1-216-838-11 | METAL GLAZE 27K 5% 1/16W   | R418     | 1-216-663-11 | METAL CHIP 3.3K 0.50% 1/10W |
| R094     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R419     | 1-216-663-11 | METAL CHIP 3.3K 0.50% 1/10W |
| R095     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R420     | 1-216-697-11 | METAL CHIP 82K 0.50% 1/10W  |
| R096     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W    | R421     | 1-216-292-11 | METAL GLAZE 20K 5% 1/16W    |
| R102     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W  | R422     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R103     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W  | R423     | 1-217-806-11 | METAL GLAZE 1 5% 1/8W       |
| R104     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W   | R424     | 1-217-806-11 | METAL GLAZE 1 5% 1/8W       |
| R105     | 1-216-649-11 | METAL CHIP 820 0.50% 1/10W | R425     | 1-216-825-11 | METAL GLAZE 2.2K 5% 1/16W   |
| R106     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W  | R426     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W    |
| R107     | 1-216-813-11 | METAL GLAZE 220 5% 1/16W   | R427     | 1-216-675-11 | METAL CHIP 10K 0.50% 1/10W  |
| R108     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W  | R428     | 1-216-805-11 | METAL GLAZE 47 5% 1/16W     |
| R109     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W   | R429     | 1-216-809-11 | METAL GLAZE 100 5% 1/16W    |
| R110     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W   | R430     | 1-216-837-11 | METAL GLAZE 22K 5% 1/16W    |
| R111     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W  | R431     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W     |
| R116     | 1-216-831-11 | METAL GLAZE 6.8K 5% 1/16W  | R432     | 1-216-857-11 | METAL GLAZE 1M 5% 1/16W     |
| R117     | 1-216-797-11 | METAL GLAZE 10 5% 1/16W    | R433     | 1-216-821-11 | METAL GLAZE 1K 5% 1/16W     |
| R202     | 1-216-845-11 | METAL GLAZE 100K 5% 1/16W  | R434     | 1-216-833-11 | METAL GLAZE 10K 5% 1/16W    |
| R203     | 1-216-823-11 | METAL GLAZE 1.5K 5% 1/16W  | R435     | 1-216-092-00 | METAL GLAZE 62K 5% 1/10W    |

| Ref. No. | Part No.     | Description | Ref. No. | Part No. | Description |      |              |             |      |       |       |
|----------|--------------|-------------|----------|----------|-------------|------|--------------|-------------|------|-------|-------|
| R436     | 1-216-830-11 | METAL GLAZE | 5.6K     | 5%       | 1/16W       | R531 | 1-216-857-11 | METAL GLAZE | 1M   | 5%    | 1/16W |
| R438     | 1-216-869-11 | METAL GLAZE | 130K     | 1%       | 1/10W       | R532 | 1-216-683-11 | METAL CHIP  | 22K  | 0.50% | 1/10W |
| R440     | 1-216-034-00 | METAL GLAZE | 240      | 5%       | 1/10W       | R533 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R443     | 1-216-851-11 | METAL GLAZE | 330K     | 5%       | 1/16W       | R535 | 1-216-863-11 | METAL GLAZE | 3.3M | 5%    | 1/16W |
| R444     | 1-216-817-11 | METAL GLAZE | 470      | 5%       | 1/16W       | R536 | 1-216-844-11 | METAL GLAZE | 82K  | 5%    | 1/16W |
| R445     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R538 | 1-216-841-11 | METAL GLAZE | 47K  | 5%    | 1/16W |
| R446     | 1-216-837-11 | METAL GLAZE | 22K      | 5%       | 1/16W       | R539 | 1-216-857-11 | METAL GLAZE | 1M   | 5%    | 1/16W |
| R448     | 1-216-817-11 | METAL GLAZE | 470      | 5%       | 1/16W       | R540 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R449     | 1-216-817-11 | METAL GLAZE | 470      | 5%       | 1/16W       | R541 | 1-216-820-11 | METAL GLAZE | 820  | 5%    | 1/16W |
| R450     | 1-216-837-11 | METAL GLAZE | 22K      | 5%       | 1/16W       | R542 | 1-216-847-11 | METAL GLAZE | 150K | 5%    | 1/16W |
| R451     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R543 | 1-216-847-11 | METAL GLAZE | 150K | 5%    | 1/16W |
| R452     | 1-216-817-11 | METAL GLAZE | 470      | 5%       | 1/16W       | R544 | 1-216-825-11 | METAL GLAZE | 2.2K | 5%    | 1/16W |
| R453     | 1-216-853-11 | METAL GLAZE | 470K     | 5%       | 1/16W       | R545 | 1-216-837-11 | METAL GLAZE | 22K  | 5%    | 1/16W |
| R454     | 1-216-814-11 | METAL GLAZE | 270      | 5%       | 1/16W       | R546 | 1-216-840-11 | METAL GLAZE | 39K  | 5%    | 1/16W |
| R455     | 1-216-800-11 | METAL GLAZE | 18       | 5%       | 1/16W       | R547 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R456     | 1-216-836-11 | METAL GLAZE | 18K      | 5%       | 1/16W       | R548 | 1-216-829-11 | METAL GLAZE | 4.7K | 5%    | 1/16W |
| R457     | 1-216-827-11 | METAL GLAZE | 3.3K     | 5%       | 1/16W       | R549 | 1-216-857-11 | METAL GLAZE | 1M   | 5%    | 1/16W |
| R459     | 1-216-817-11 | METAL GLAZE | 470      | 5%       | 1/16W       | R550 | 1-216-825-11 | METAL GLAZE | 2.2K | 5%    | 1/16W |
| R460     | 1-216-809-11 | METAL GLAZE | 100      | 5%       | 1/16W       | R551 | 1-216-825-11 | METAL GLAZE | 2.2K | 5%    | 1/16W |
| R461     | 1-216-857-11 | METAL GLAZE | 1M       | 5%       | 1/16W       | R552 | 1-216-827-11 | METAL GLAZE | 3.3K | 5%    | 1/16W |
| R465     | 1-216-831-11 | METAL GLAZE | 6.8K     | 5%       | 1/16W       | R553 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R466     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R554 | 1-216-847-11 | METAL GLAZE | 150K | 5%    | 1/16W |
| R467     | 1-216-837-11 | METAL GLAZE | 22K      | 5%       | 1/16W       | R556 | 1-216-825-11 | METAL GLAZE | 2.2K | 5%    | 1/16W |
| R468     | 1-216-815-11 | METAL GLAZE | 330      | 5%       | 1/16W       | R557 | 1-216-821-11 | METAL GLAZE | 1K   | 5%    | 1/16W |
| R469     | 1-216-115-00 | METAL GLAZE | 560K     | 5%       | 1/10W       | R559 | 1-216-843-11 | METAL GLAZE | 68K  | 5%    | 1/16W |
| R471     | 1-216-821-11 | METAL GLAZE | 1K       | 5%       | 1/16W       | R560 | 1-216-841-11 | METAL GLAZE | 47K  | 5%    | 1/16W |
| R472     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R561 | 1-216-841-11 | METAL GLAZE | 47K  | 5%    | 1/16W |
| R473     | 1-216-830-11 | METAL GLAZE | 5.6K     | 5%       | 1/16W       | R562 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R474     | 1-216-825-11 | METAL GLAZE | 2.2K     | 5%       | 1/16W       | R563 | 1-216-846-11 | METAL GLAZE | 120K | 5%    | 1/16W |
| R480     | 1-216-814-11 | METAL GLAZE | 270      | 5%       | 1/16W       | R590 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R502     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R601 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R503     | 1-216-829-11 | METAL GLAZE | 4.7K     | 5%       | 1/16W       | R602 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R505     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R801 | 1-216-830-11 | METAL GLAZE | 5.6K | 5%    | 1/16W |
| R506     | 1-216-837-11 | METAL GLAZE | 22K      | 5%       | 1/16W       | R802 | 1-216-837-11 | METAL GLAZE | 22K  | 5%    | 1/16W |
| R507     | 1-216-832-11 | METAL GLAZE | 8.2K     | 5%       | 1/16W       | R803 | 1-216-837-11 | METAL GLAZE | 22K  | 5%    | 1/16W |
| R508     | 1-216-831-11 | METAL GLAZE | 6.8K     | 5%       | 1/16W       | R804 | 1-216-837-11 | METAL GLAZE | 22K  | 5%    | 1/16W |
| R509     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R805 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R510     | 1-216-797-11 | METAL GLAZE | 10       | 5%       | 1/16W       | R806 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R511     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R807 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R512     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R808 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R513     | 1-216-859-11 | METAL GLAZE | 1.5M     | 5%       | 1/16W       | R809 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R514     | 1-216-851-11 | METAL GLAZE | 330K     | 5%       | 1/16W       | R810 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R515     | 1-216-825-11 | METAL GLAZE | 2.2K     | 5%       | 1/16W       | R811 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R516     | 1-216-835-11 | METAL GLAZE | 15K      | 5%       | 1/16W       | R812 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R517     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R813 | 1-216-833-11 | METAL GLAZE | 10K  | 5%    | 1/16W |
| R519     | 1-216-844-11 | METAL GLAZE | 82K      | 5%       | 1/16W       | R814 | 1-216-668-11 | METAL CHIP  | 5.1K | 0.50% | 1/10W |
| R520     | 1-216-849-11 | METAL GLAZE | 220K     | 5%       | 1/16W       | R815 | 1-216-845-11 | METAL GLAZE | 100K | 5%    | 1/16W |
| R521     | 1-216-837-11 | METAL GLAZE | 22K      | 5%       | 1/16W       | R816 | 1-216-816-11 | METAL GLAZE | 390  | 5%    | 1/16W |
| R522     | 1-216-845-11 | METAL GLAZE | 100K     | 5%       | 1/16W       | R817 | 1-216-698-11 | METAL CHIP  | 91K  | 0.50% | 1/10W |
| R523     | 1-216-829-11 | METAL GLAZE | 4.7K     | 5%       | 1/16W       | R818 | 1-216-661-11 | METAL CHIP  | 2.7K | 0.50% | 1/10W |
| R524     | 1-216-115-00 | METAL GLAZE | 560K     | 5%       | 1/10W       | R819 | 1-216-661-11 | METAL CHIP  | 2.7K | 0.50% | 1/10W |
| R525     | 1-216-833-11 | METAL GLAZE | 10K      | 5%       | 1/16W       | R820 | 1-216-809-11 | METAL GLAZE | 100  | 5%    | 1/16W |
| R526     | 1-216-829-11 | METAL GLAZE | 4.7K     | 5%       | 1/16W       | R821 | 1-216-689-11 | METAL CHIP  | 39K  | 0.50% | 1/10W |
| R527     | 1-216-683-11 | METAL CHIP  | 22K      | 0.50%    | 1/10W       | R822 | 1-216-678-11 | METAL CHIP  | 13K  | 0.50% | 1/10W |
| R528     | 1-216-848-11 | METAL GLAZE | 180K     | 5%       | 1/16W       | R823 | 1-216-857-11 | METAL GLAZE | 1M   | 5%    | 1/16W |
| R529     | 1-216-062-00 | METAL GLAZE | 3.6K     | 5%       | 1/10W       | R824 | 1-216-851-11 | METAL GLAZE | 330K | 5%    | 1/16W |
| R530     | 1-216-826-11 | METAL GLAZE | 2.7K     | 5%       | 1/16W       | R825 | 1-216-857-11 | METAL GLAZE | 1M   | 5%    | 1/16W |

| Ref.No. | Part No.     | Description                                   |      |       |       |  |  | Ref.No. | Part No.     | Description                      |  |  |  |  |  |
|---------|--------------|---|------|-------|-------|--|--|---------|--------------|----------------------------------|--|--|--|--|--|
| R827    | 1-216-833-11 | METAL GLAZE                                   | 10K  | 5%    | 1/16W |  |  | S814    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(8)    |  |  |  |  |  |
| R828    | 1-216-845-11 | METAL GLAZE                                   | 100K | 5%    | 1/16W |  |  | S815    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(+10)  |  |  |  |  |  |
| R829    | 1-216-859-11 | METAL GLAZE                                   | 1.5M | 5%    | 1/16W |  |  | S816    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(1)    |  |  |  |  |  |
| R830    | 1-216-858-11 | METAL GLAZE                                   | 1.2M | 5%    | 1/16W |  |  | S817    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(4)    |  |  |  |  |  |
| R831    | 1-216-845-11 | METAL GLAZE                                   | 100K | 5%    | 1/16W |  |  | S818    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(7)    |  |  |  |  |  |
| R834    | 1-216-833-11 | METAL GLAZE                                   | 10K  | 5%    | 1/16W |  |  | S819    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(10)   |  |  |  |  |  |
| R835    | 1-216-833-11 | METAL GLAZE                                   | 10K  | 5%    | 1/16W |  |  | S820    | 1-571-506-41 | SWITCH, SLIDE (AREA)             |  |  |  |  |  |
| R836    | 1-216-837-11 | METAL GLAZE                                   | 22K  | 5%    | 1/16W |  |  | S901    | 1-570-953-11 | SWITCH, PUSH (1 KEY)(OPEN)       |  |  |  |  |  |
| R837    | 1-216-837-11 | METAL GLAZE                                   | 22K  | 5%    | 1/16W |  |  | S902    | 1-572-025-11 | MICRO SW                         |  |  |  |  |  |
| R838    | 1-216-110-00 | METAL CHIP                                    | 360K | 0.50% | 1/10W |  |  | T001    | 1-404-690-11 | TRANSFORMER, IF                  |  |  |  |  |  |
| R839    | 1-216-103-00 | METAL CHIP                                    | 180K | 0.50% | 1/10W |  |  | T002    | 1-448-302-11 | TRANSFORMER, DC-DC CONVERTER     |  |  |  |  |  |
| R841    | 1-218-272-11 | METAL GLAZE                                   | 5.1K | 5%    | 1/16W |  |  | T401    | 1-450-227-21 | TRANSFORMER, DC-DC CONVERTER     |  |  |  |  |  |
| R842    | 1-216-827-11 | METAL GLAZE                                   | 3.3K | 5%    | 1/16W |  |  | X001    | 1-579-101-11 | VIBRATOR, CRYSTAL (4.5MHz)       |  |  |  |  |  |
| R848    | 1-216-827-11 | METAL GLAZE                                   | 3.3K | 5%    | 1/16W |  |  | X301    | 1-567-737-11 | VIBRATOR, CRYSTAL (16.934MHz)    |  |  |  |  |  |
| R849    | 1-216-843-11 | METAL GLAZE                                   | 68K  | 5%    | 1/16W |  |  | X801    | 1-577-064-11 | VIBRATOR, CHIP CERAMIC (3.58MHz) |  |  |  |  |  |
| R850    | 1-216-837-11 | METAL GLAZE                                   | 22K  | 5%    | 1/16W |  |  | X802    | 1-577-316-11 | VIBRATOR, CRYSTAL (32.768kHz)    |  |  |  |  |  |
| R851    | 1-216-857-11 | METAL GLAZE                                   | 1M   | 5%    | 1/16W |  |  |         |              |                                  |  |  |  |  |  |
| R852    | 1-216-837-11 | METAL GLAZE                                   | 22K  | 5%    | 1/16W |  |  |         |              |                                  |  |  |  |  |  |
| R853    | 1-216-075-00 | METAL GLAZE                                   | 12K  | 5%    | 1/10W |  |  |         |              |                                  |  |  |  |  |  |
| R854    | 1-216-066-00 | METAL GLAZE                                   | 5.1K | 5%    | 1/10W |  |  |         |              |                                  |  |  |  |  |  |
| R855    | 1-216-061-00 | METAL GLAZE                                   | 3.3K | 5%    | 1/10W |  |  |         |              |                                  |  |  |  |  |  |
| R856    | 1-216-242-00 | METAL GLAZE                                   | 68K  | 5%    | 1/8W  |  |  |         |              |                                  |  |  |  |  |  |
| R857    | 1-216-224-00 | METAL GLAZE                                   | 12K  | 5%    | 1/8W  |  |  |         |              |                                  |  |  |  |  |  |
| R858    | 1-216-066-00 | METAL GLAZE                                   | 5.1K | 5%    | 1/10W |  |  |         |              |                                  |  |  |  |  |  |
| R859    | 1-216-061-00 | METAL GLAZE                                   | 3.3K | 5%    | 1/10W |  |  |         |              |                                  |  |  |  |  |  |
| R861    | 1-216-837-11 | METAL GLAZE                                   | 22K  | 5%    | 1/16W |  |  |         |              |                                  |  |  |  |  |  |
| R863    | 1-216-861-11 | METAL GLAZE                                   | 2.2M | 5%    | 1/16W |  |  |         |              |                                  |  |  |  |  |  |
| RV001   | 1-238-733-11 | RES, ADJ, METAL GLAZE                         | 6.8K |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV301   | 1-241-017-11 | RES, VAR, CARBON 10K/10K (VOLUME)             |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV401   | 1-241-066-11 | RES, ADJ, METAL GRAZE                         | 4.7K |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV402   | 1-241-069-11 | RES, ADJ, METAL GRAZE                         | 47K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV403   | 1-241-065-11 | RES, ADJ, METAL GRAZE                         | 2.2K |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV501   | 1-241-068-11 | RES, ADJ, METAL GRAZE                         | 22K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV502   | 1-241-068-11 | RES, ADJ, METAL GRAZE                         | 22K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV503   | 1-241-069-11 | RES, ADJ, METAL GRAZE                         | 47K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV504   | 1-241-064-11 | RES, ADJ, METAL GRAZE                         | 1K   |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV505   | 1-241-068-11 | RES, ADJ, METAL GRAZE                         | 22K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| RV801   | 1-241-067-11 | RES, ADJ, METAL GRAZE                         | 10K  |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S001    | 1-570-397-11 | SWITCH, SLIDE (TUNER SENSE)                   |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S002    | 1-570-397-11 | SWITCH, SLIDE (FM MODE)                       |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S003    | 1-570-397-11 | SWITCH, SLIDE (TUNER ISS)                     |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S301    | 1-570-386-21 | SWITCH, SLIDE (BASS BOOST)                    |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S401    | 1-570-953-11 | SWITCH, PUSH (1 KEY)(BP-2 ON)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S801    | 1-570-909-21 | SWITCH, TACTIL (REFLOW TYPE)(►II)             |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S802    | 1-570-909-21 | SWITCH, TACTIL (REFLOW TYPE)(■)               |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S803    | 1-570-909-21 | SWITCH, TACTIL (REFLOW TYPE)(◄II)             |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S804    | 1-570-909-21 | SWITCH, TACTIL (REFLOW TYPE)(►II)             |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S805    | 1-570-204-11 | SWITCH, KEY BOARD (PLAY MODE)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S806    | 1-570-204-11 | SWITCH, KEY BOARD (ENTER MEMORY)              |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S807    | 1-571-860-11 | SWITCH, SLIDE (HOLD/RESUME)                   |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S808    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(3)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S809    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(6)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S810    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(9)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S811    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)<br>(TUNER ON/BAND) |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S812    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(2)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
| S813    | 1-571-737-21 | SWITCH, KEY BOARD (REFLOW)(5)                 |      |       |       |  |  |         |              |                                  |  |  |  |  |  |
|         |              | EA: Saudi Arabia                              |      |       |       |  |  |         |              |                                  |  |  |  |  |  |

**Note:**  
The components identified by mark or dotted line with mark are critical for safety.  
Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.